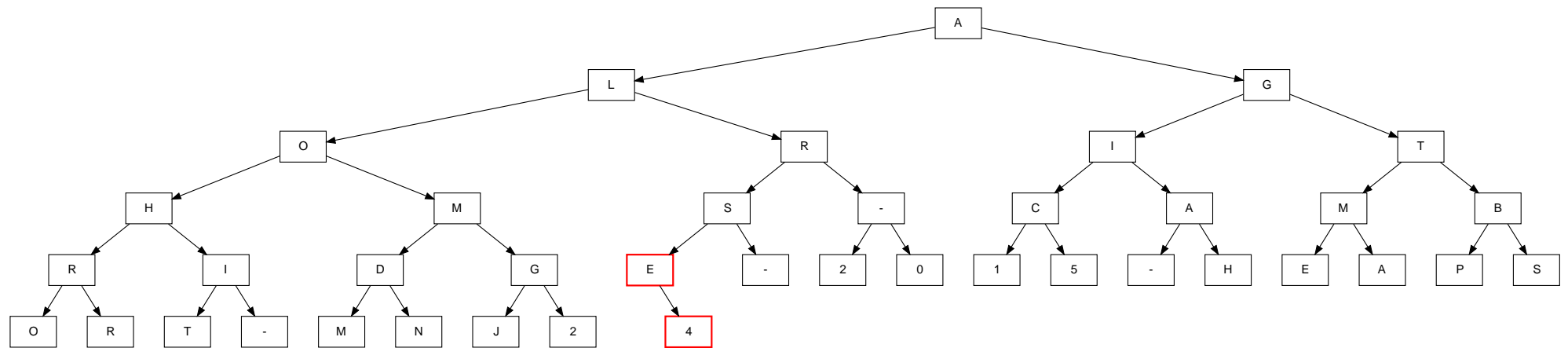


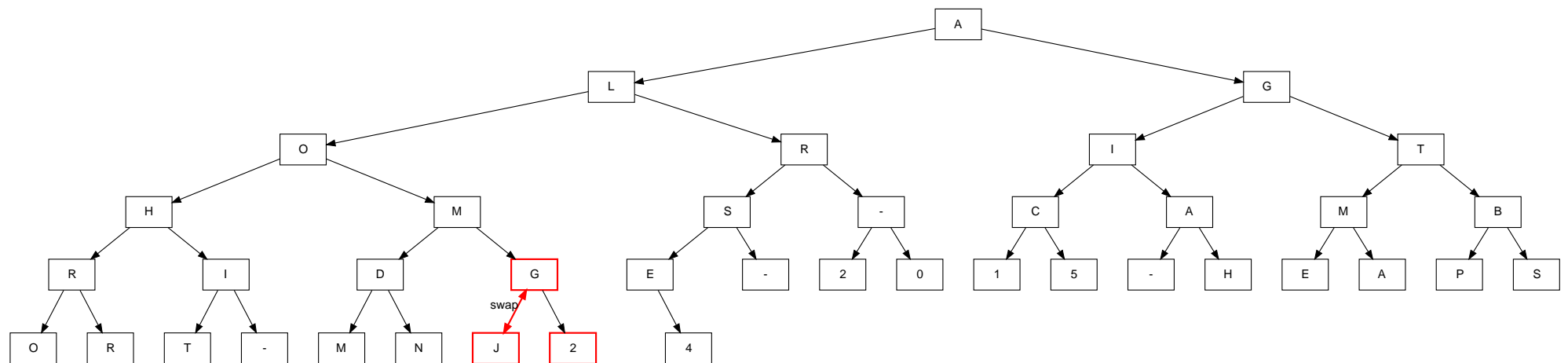
# Step 1: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, I, D, G, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, T, -, M, N, J, 2, 4]



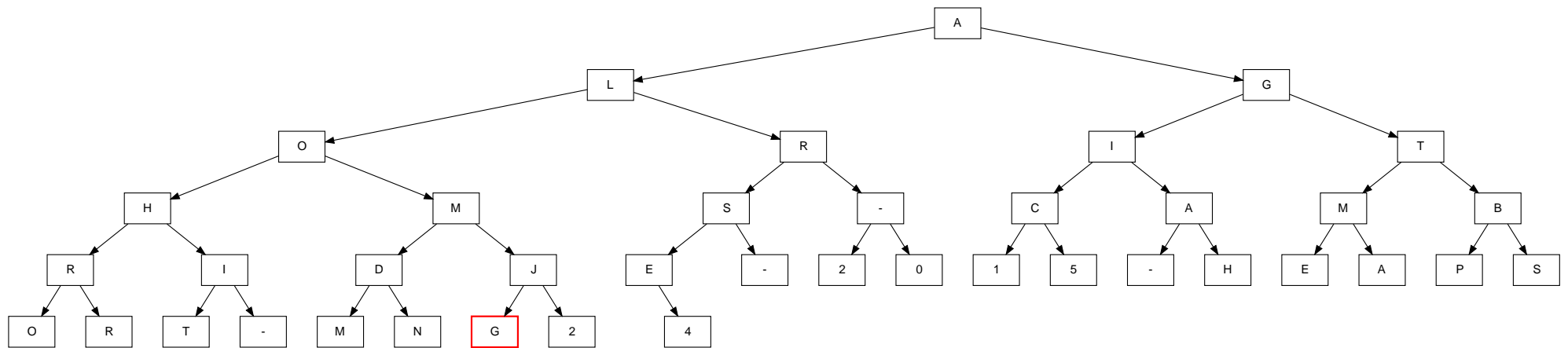
## Step 2: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, I, D, G, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, T, -, M, N, J, 2, 4]



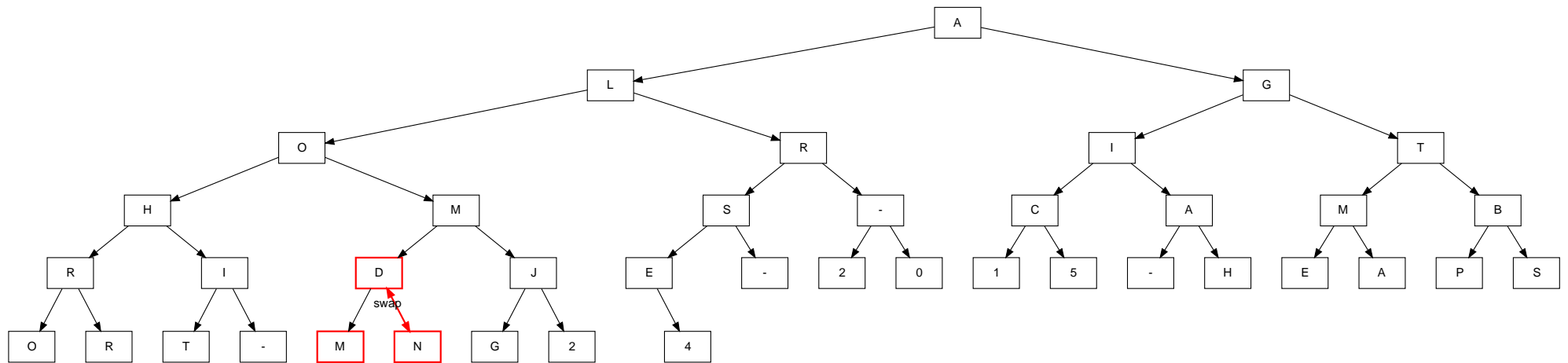
### Step 3: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, I, D, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, T, -, M, N, G, 2, 4]



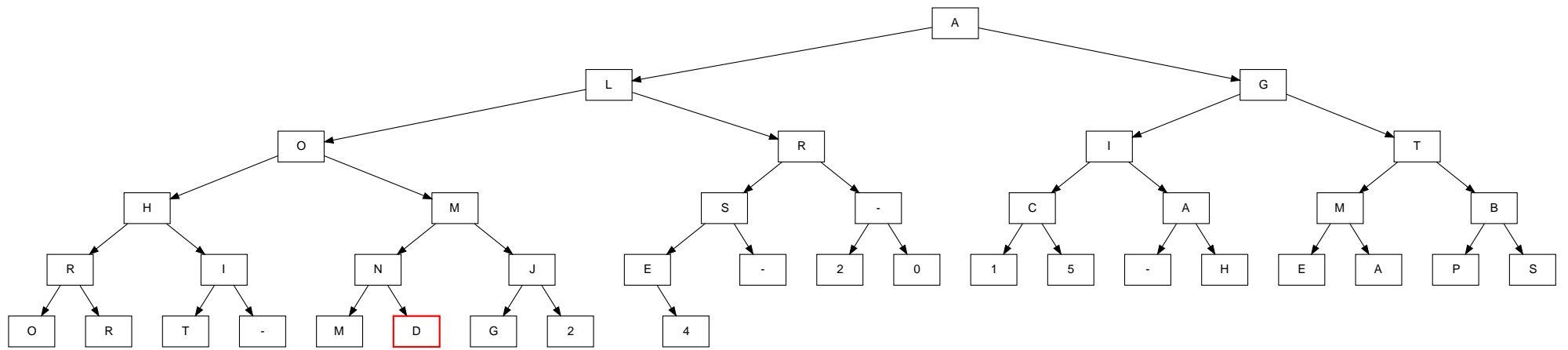
# Step 4: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, I, D, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, T, -, M, N, G, 2, 4]



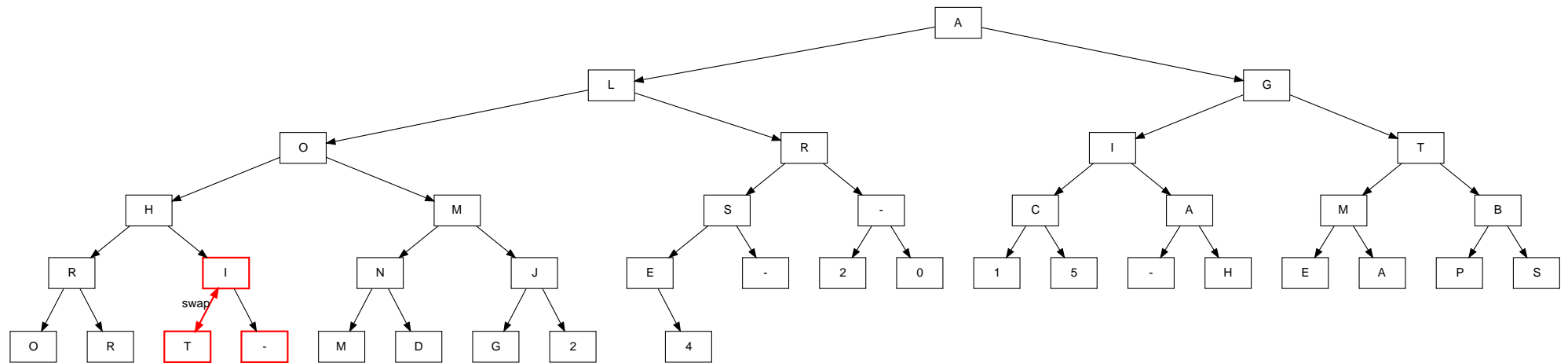
# Step 5: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, I, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, T, -, M, D, G, 2, 4]



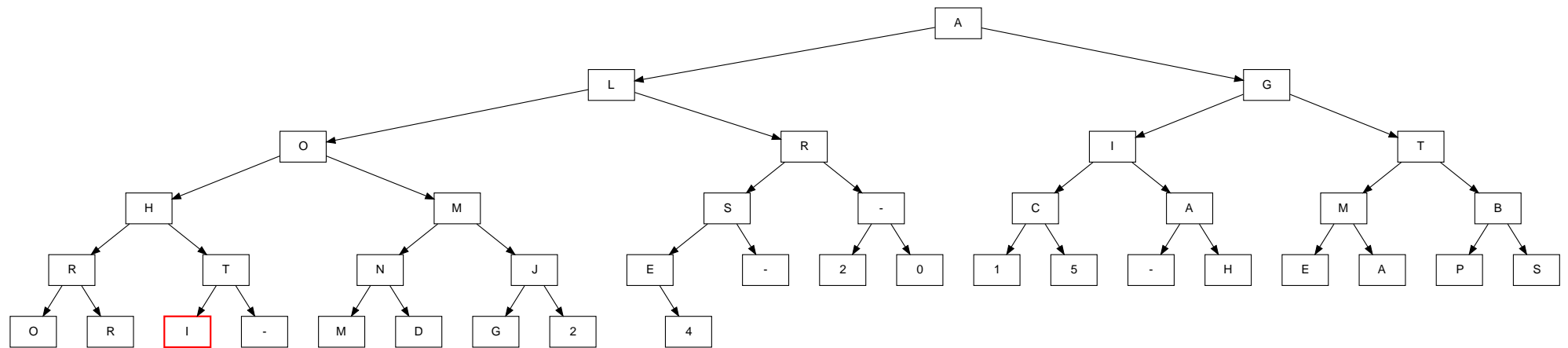
# Step 6: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, I, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, T, -, M, D, G, 2, 4]



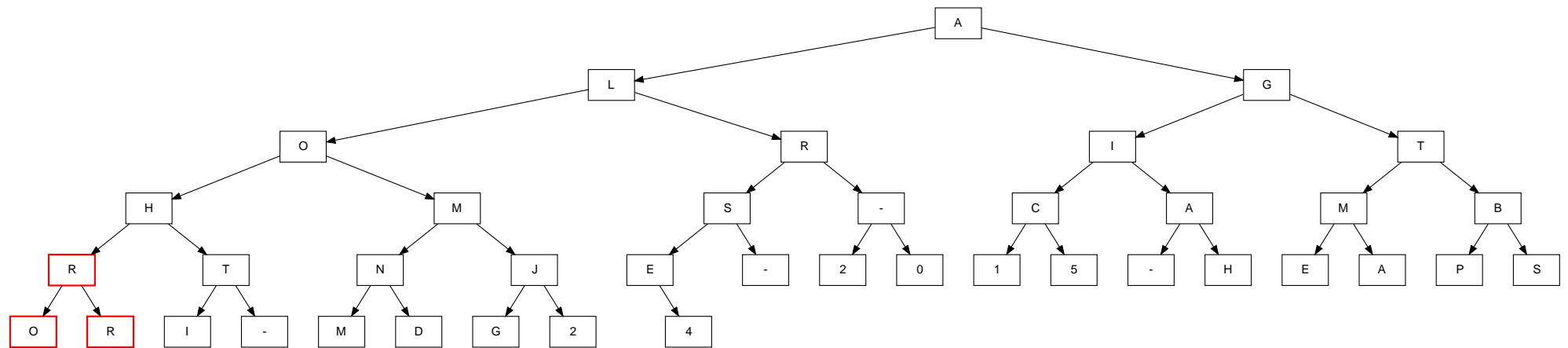
# Step 7: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, T, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, I, -, M, D, G, 2, 4]



# Step 8: Heapify

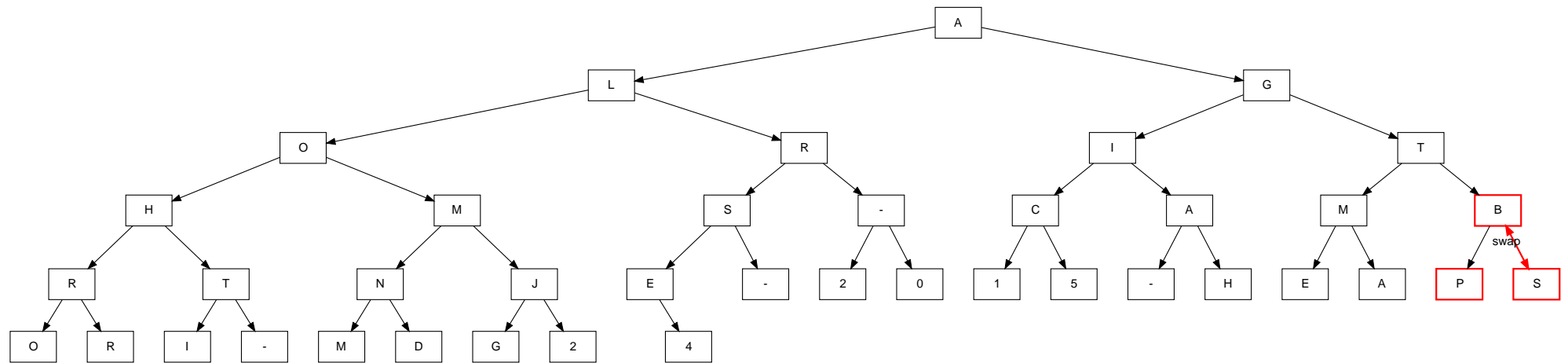
[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, T, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, I, -, M, D, G, 2, 4]





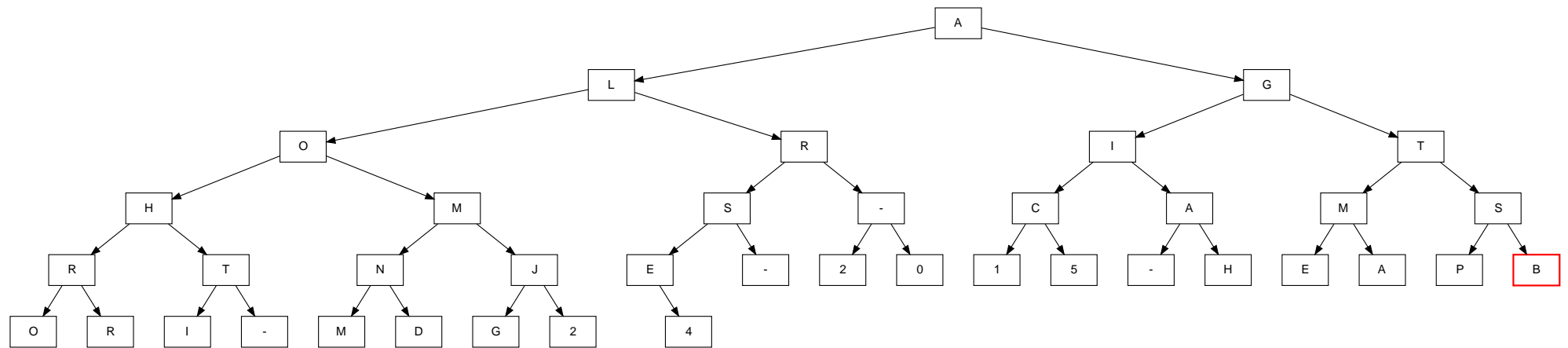
# Step 9: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, B, R, T, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, S, O, R, I, -, M, D, G, 2, 4]



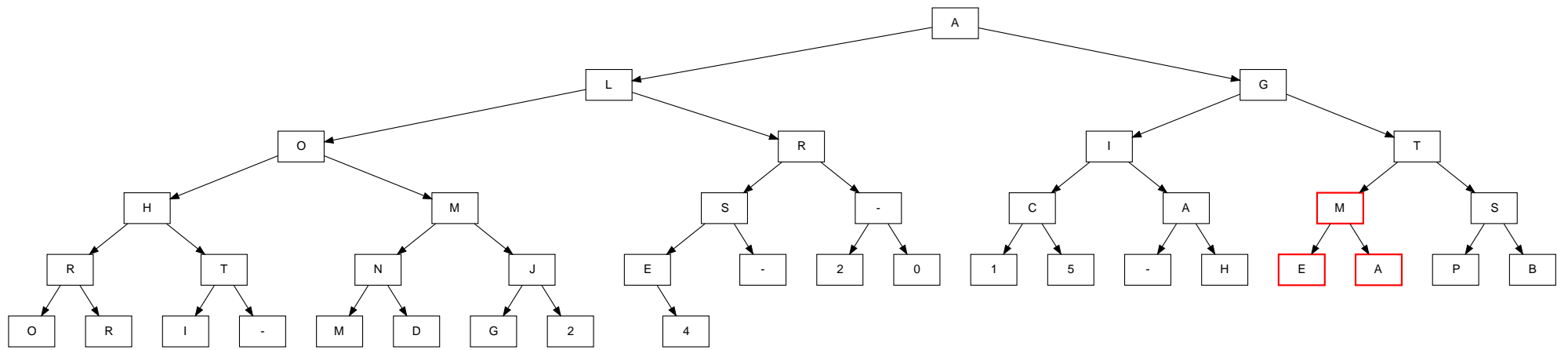
# Step 10: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, S, R, T, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



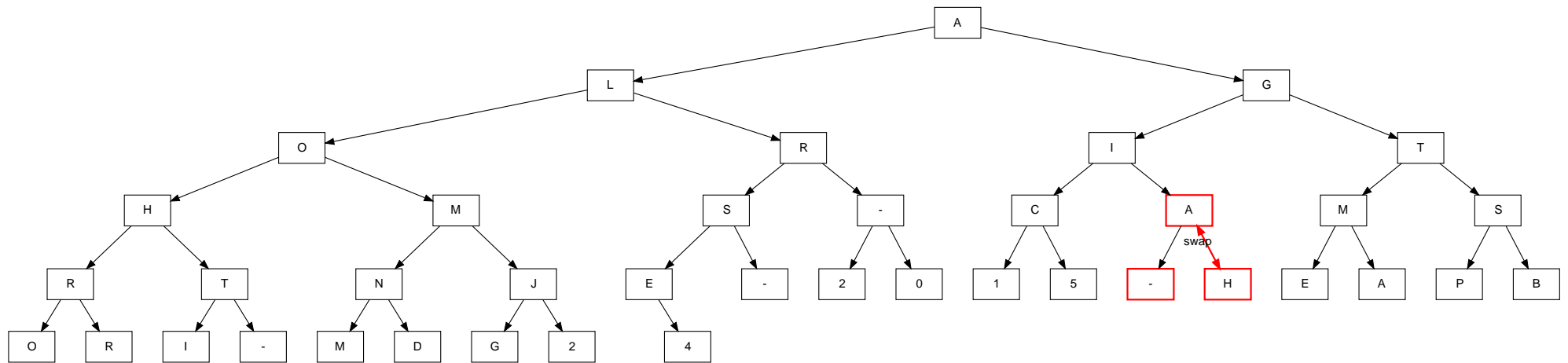
# Step 11: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, S, R, T, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



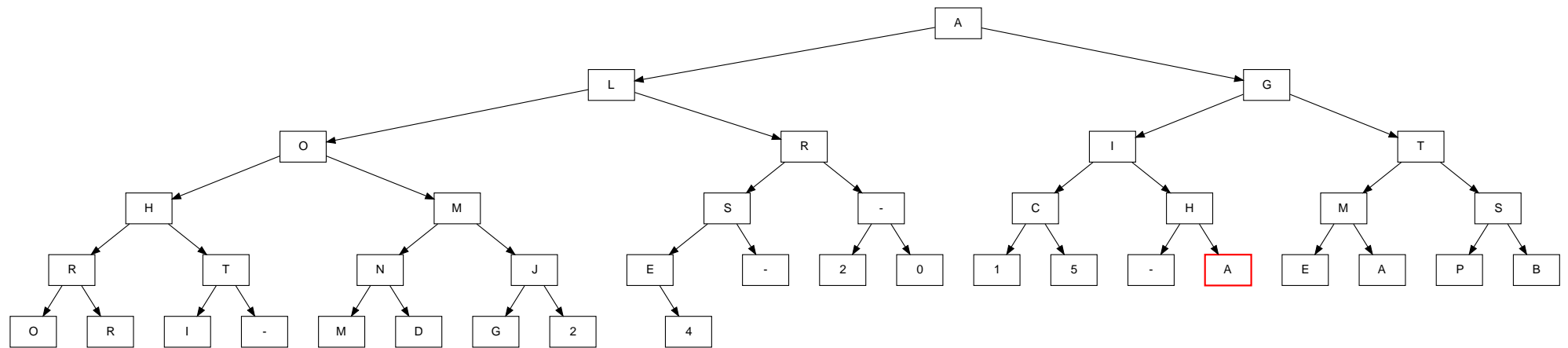
# Step 12: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, A, M, S, R, T, N, J, E, -, 2, 0, 1, 5, -, H, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



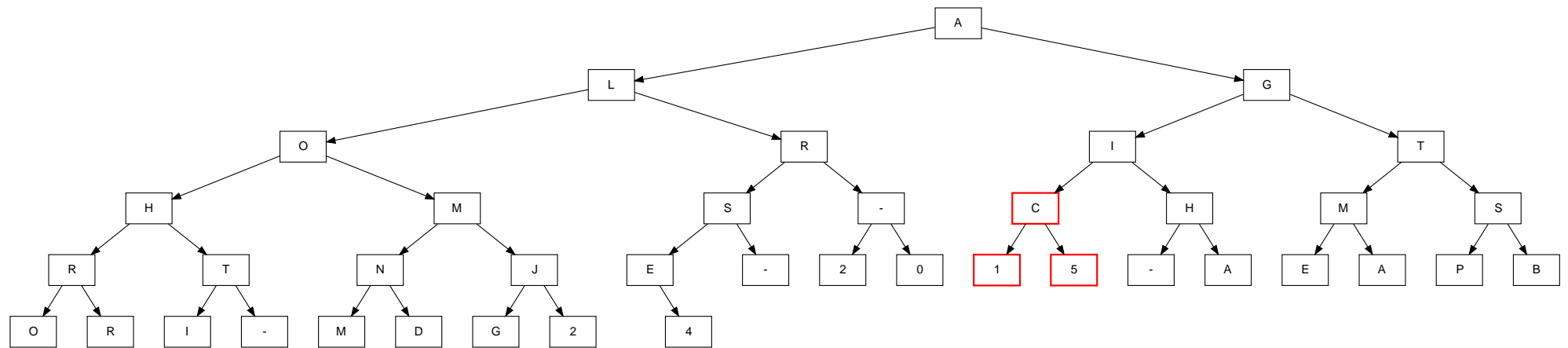
# Step 13: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, H, M, S, R, T, N, J, E, -, 2, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



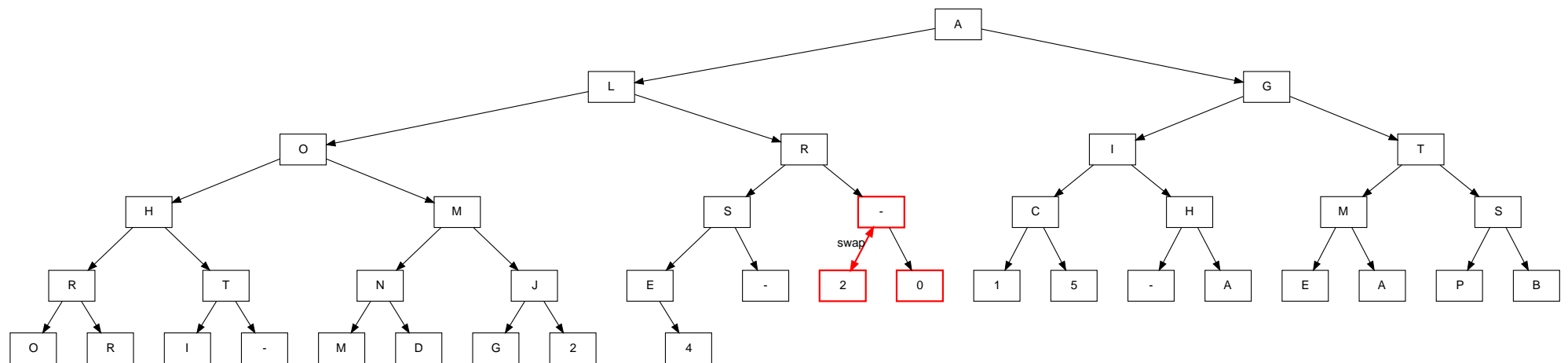
# Step 14: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, H, M, S, R, T, N, J, E, -, 2, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



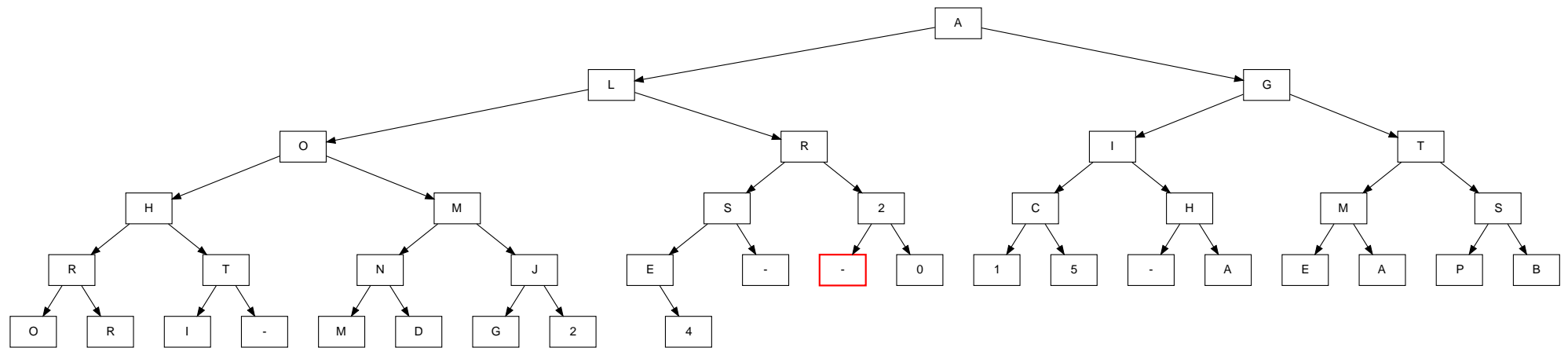
# Step 15: Heapify

[A, L, G, O, R, I, T, H, M, S, -, C, H, M, S, R, T, N, J, E, -, 2, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



# Step 16: Heapify

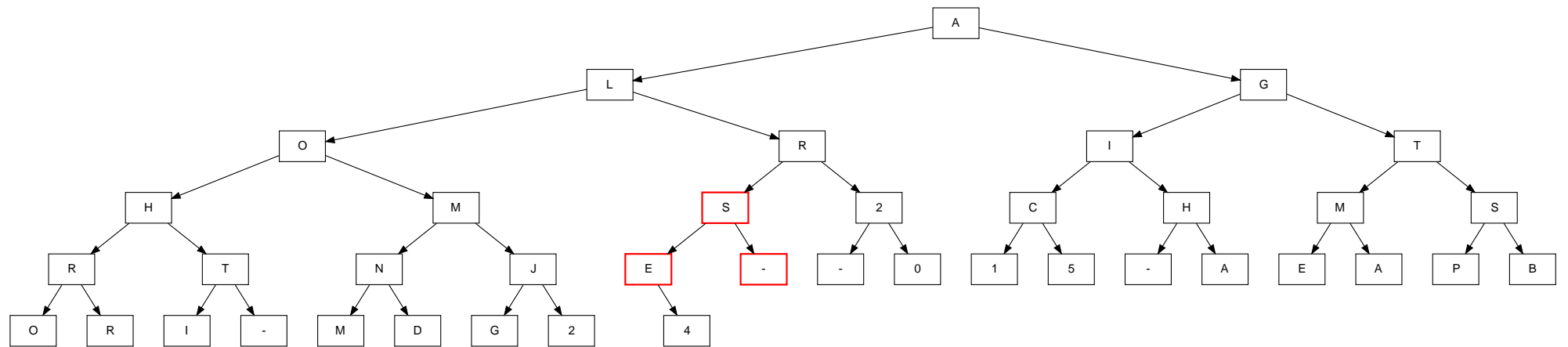
[A, L, G, O, R, I, T, H, M, S, 2, C, H, M, S, R, T, N, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]





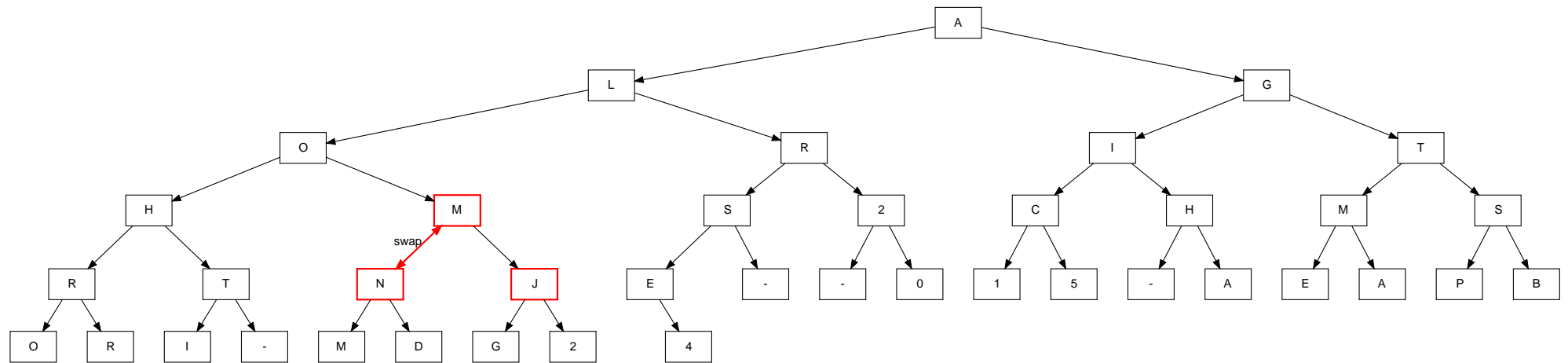
# Step 17: Heapify

[A, L, G, O, R, I, T, H, M, S, 2, C, H, M, S, R, T, N, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



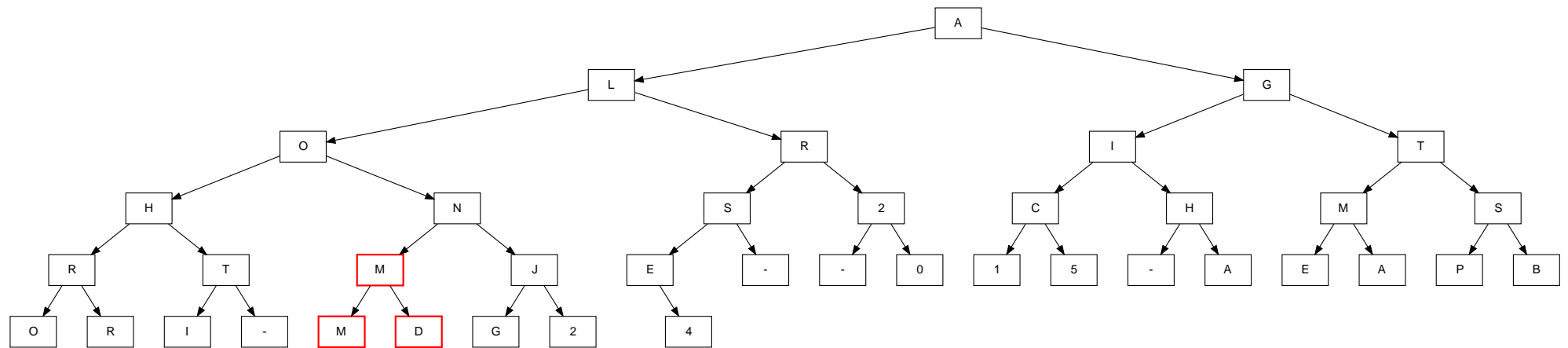
# Step 18: Heapify

[A, L, G, O, R, I, T, H, M, S, 2, C, H, M, S, R, T, N, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



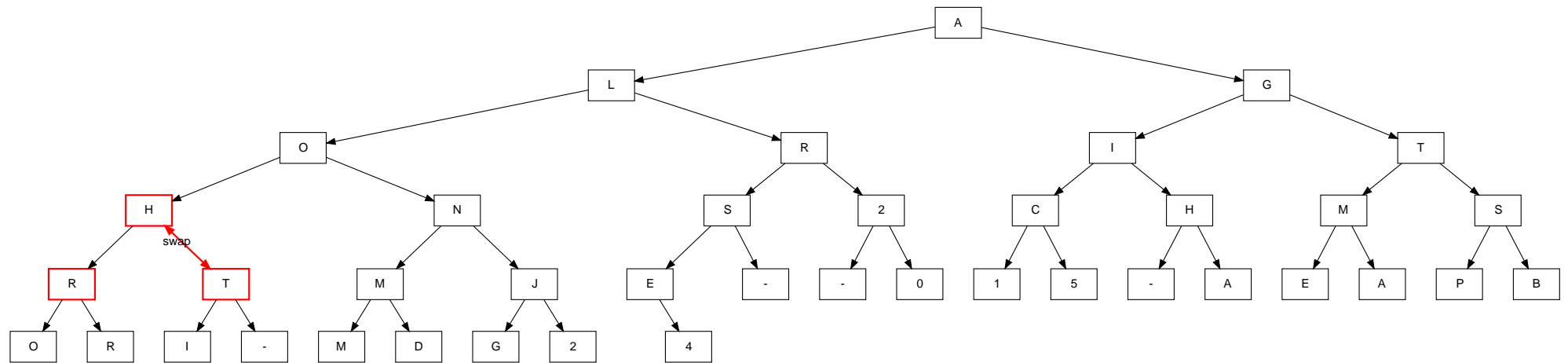
# Step 19: Heapify

[A, L, G, O, R, I, T, H, N, S, 2, C, H, M, S, R, T, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



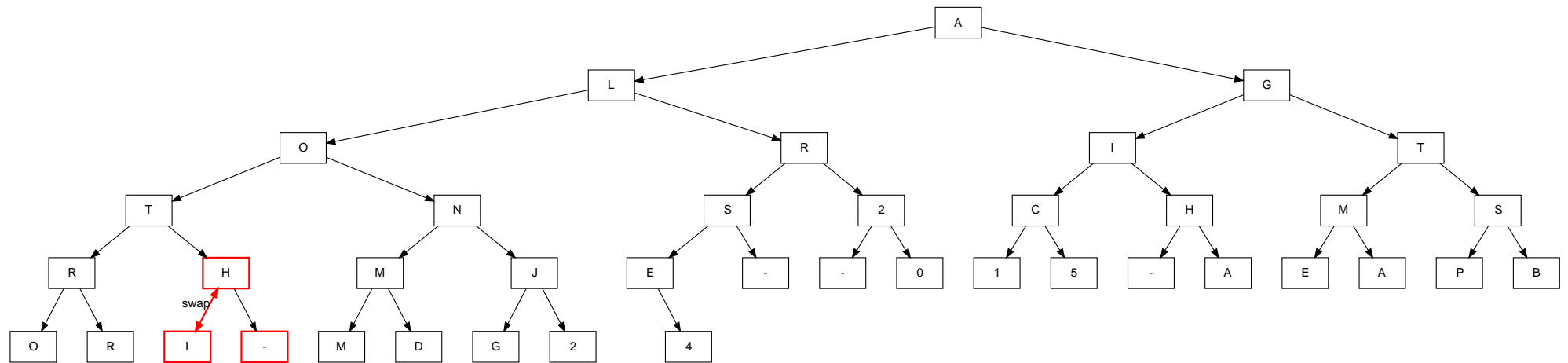
# Step 20: Heapify

[A, L, G, O, R, I, T, H, N, S, 2, C, H, M, S, R, T, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



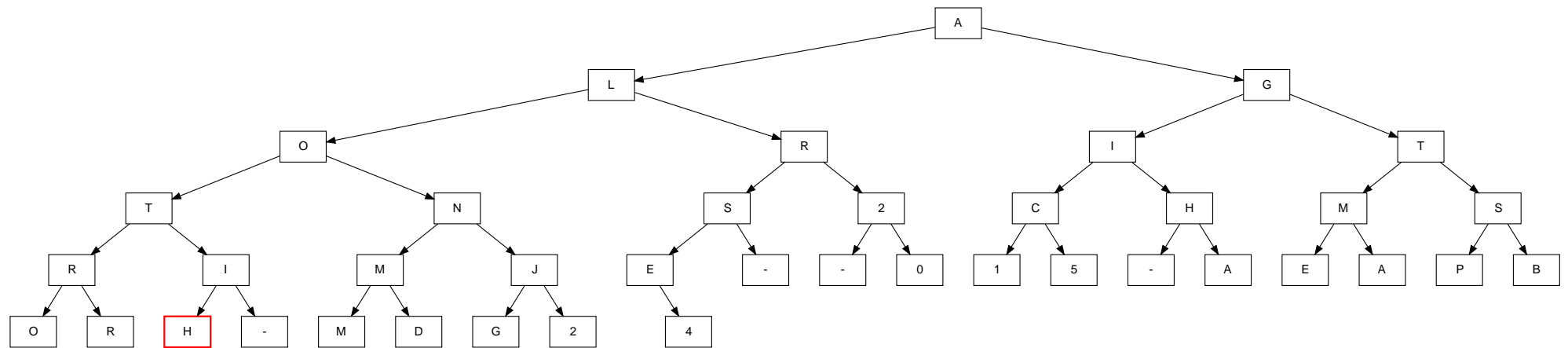
# Step 21: Heapify

[A, L, G, O, R, I, T, T, N, S, 2, C, H, M, S, R, H, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, I, -, M, D, G, 2, 4]



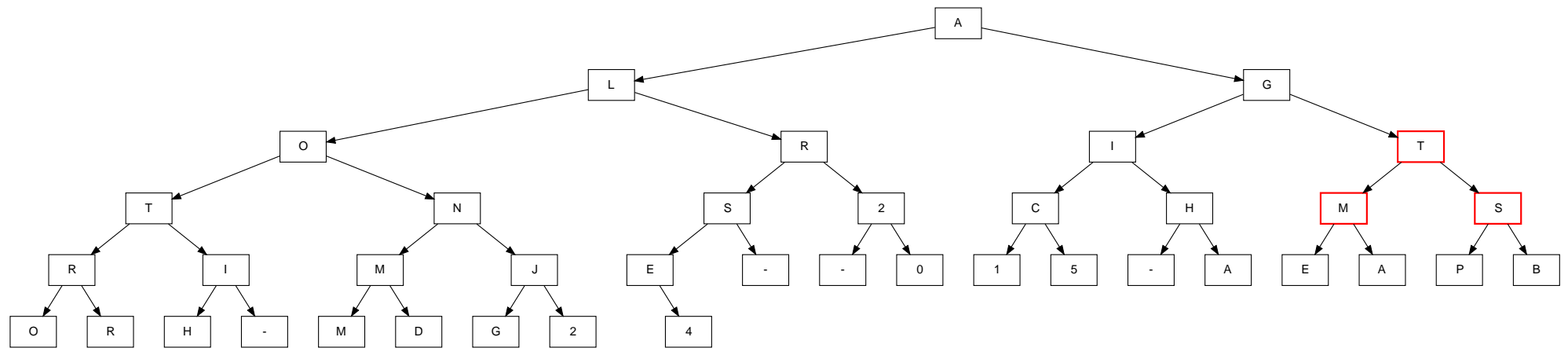
# Step 22: Heapify

[A, L, G, O, R, I, T, T, N, S, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



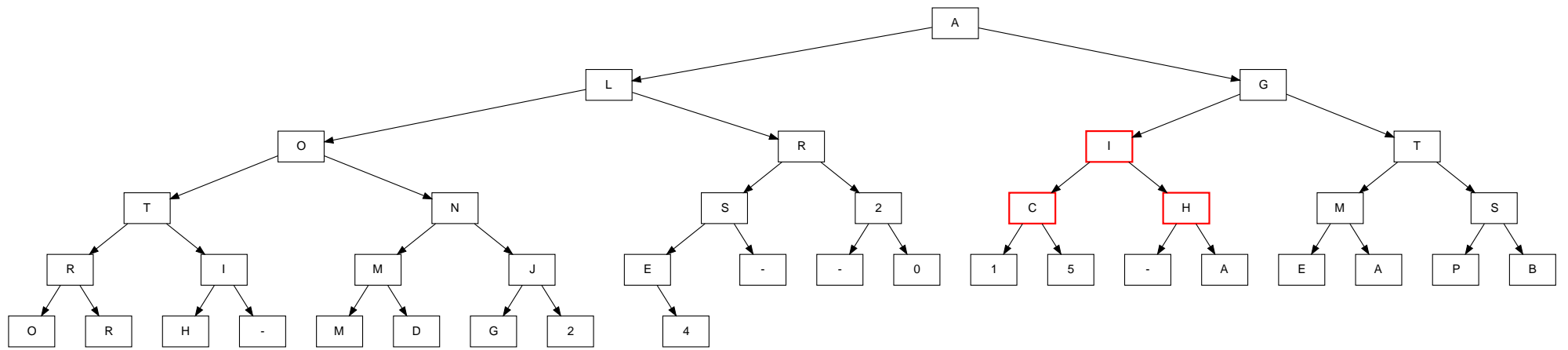
# Step 23: Heapify

[A, L, G, O, R, I, T, T, N, S, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



# Step 24: Heapify

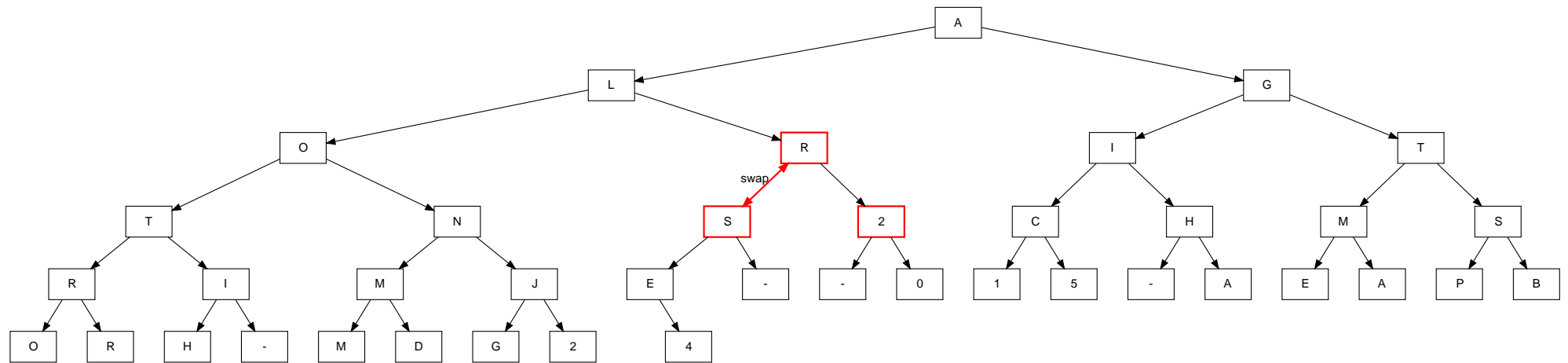
[A, L, G, O, R, I, T, T, N, S, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]





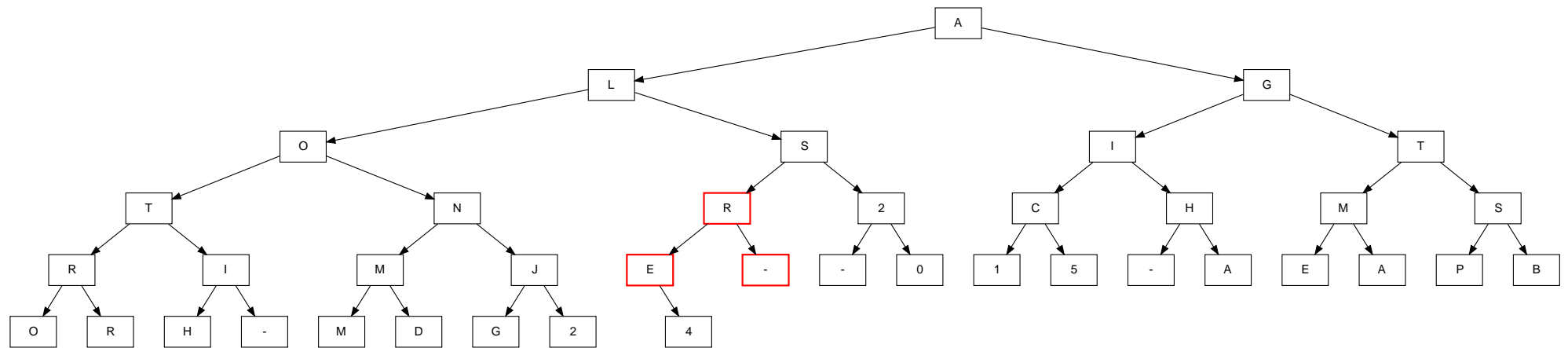
# Step 25: Heapify

[A, L, G, O, R, I, T, T, N, S, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



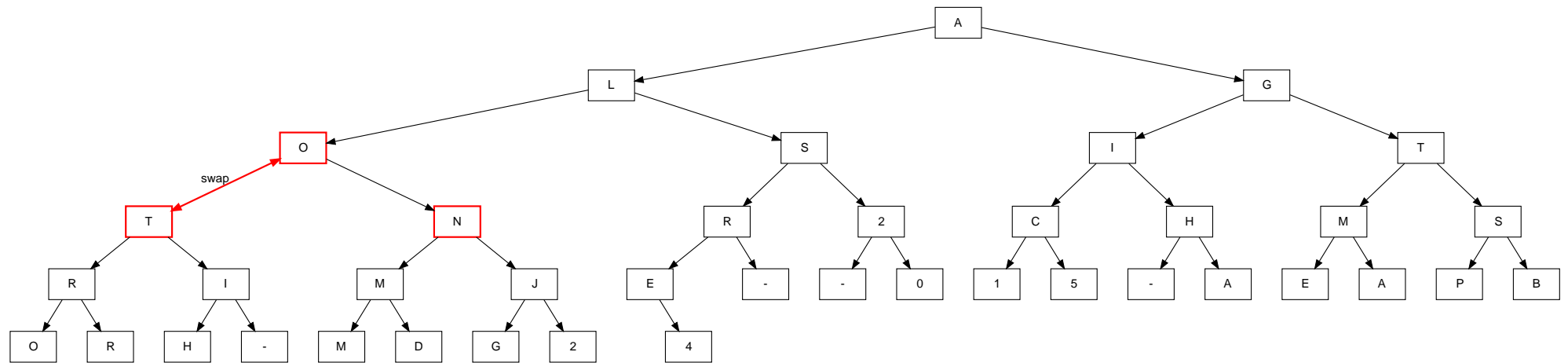
# Step 26: Heapify

[A, L, G, O, S, I, T, T, N, R, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



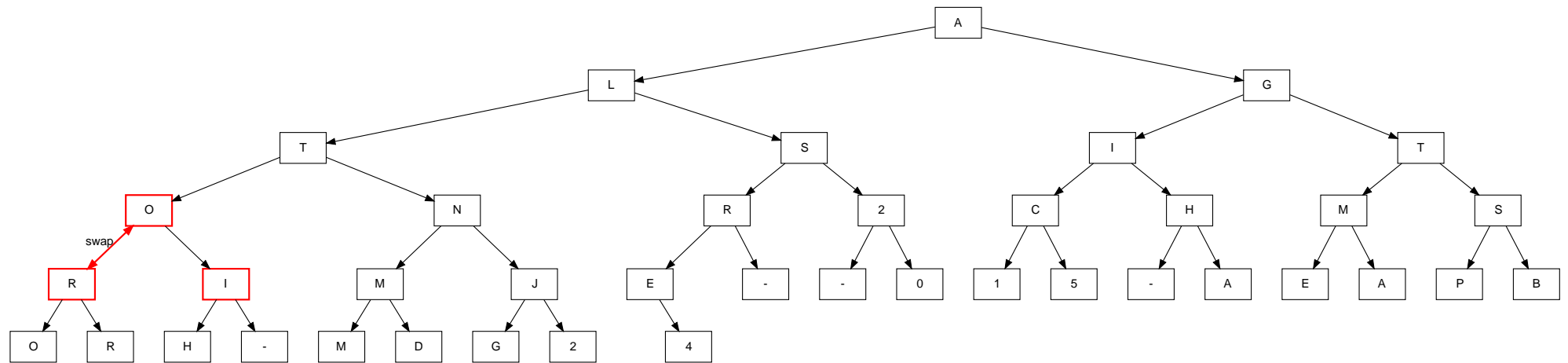
# Step 27: Heapify

[A, L, G, O, S, I, T, T, N, R, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



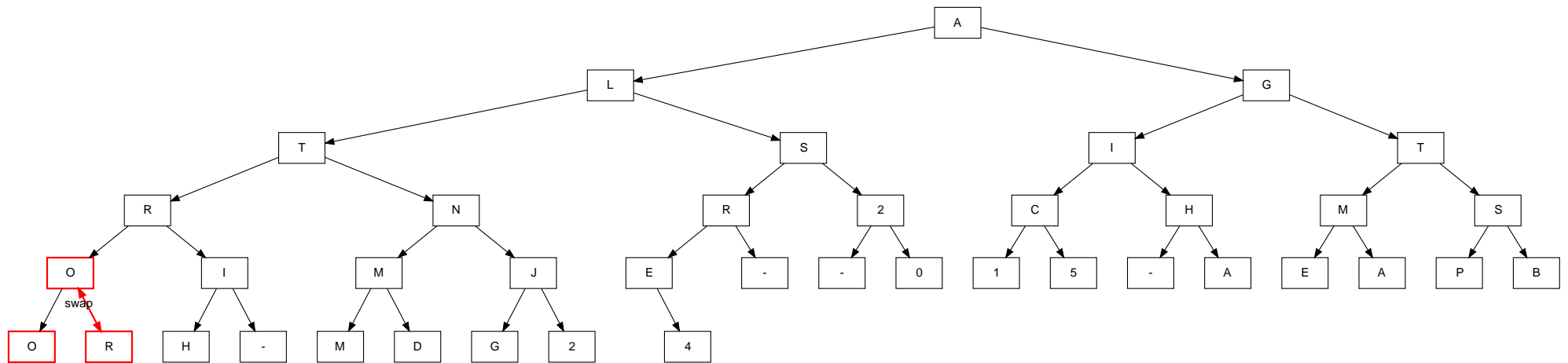
# Step 28: Heapify

[A, L, G, T, S, I, T, O, N, R, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



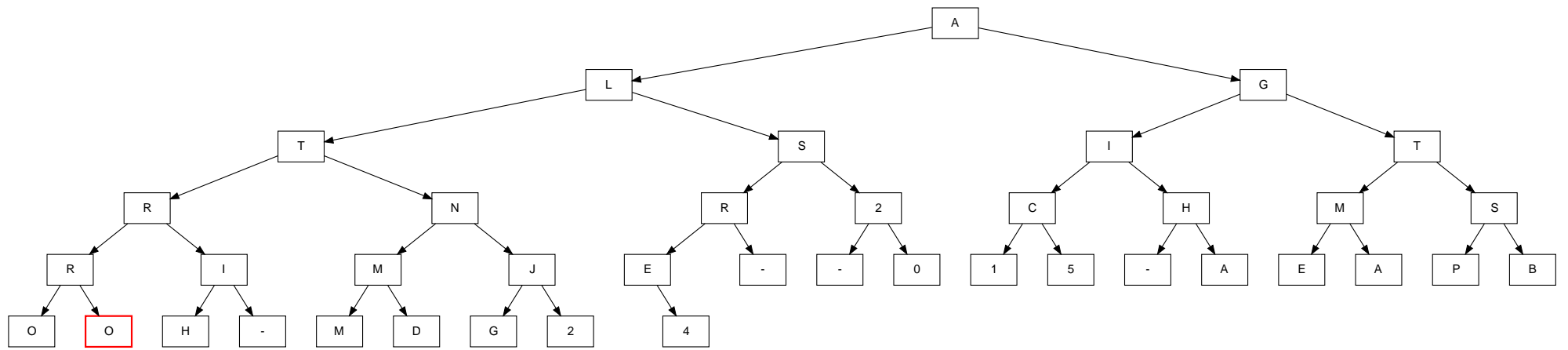
# Step 29: Heapify

[A, L, G, T, S, I, T, R, N, R, 2, C, H, M, S, O, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, R, H, -, M, D, G, 2, 4]



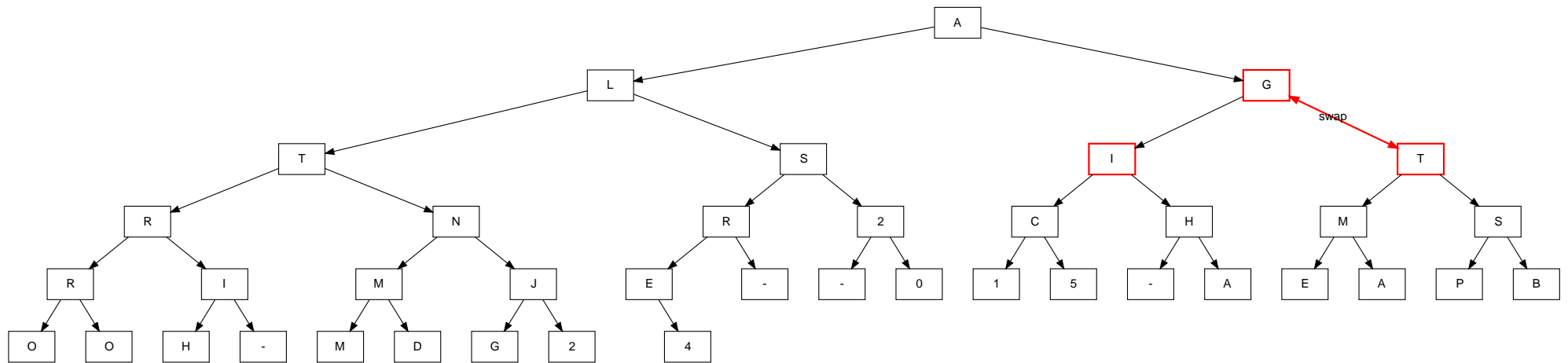
# Step 30: Heapify

[A, L, G, T, S, I, T, R, N, R, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, O, H, -, M, D, G, 2, 4]



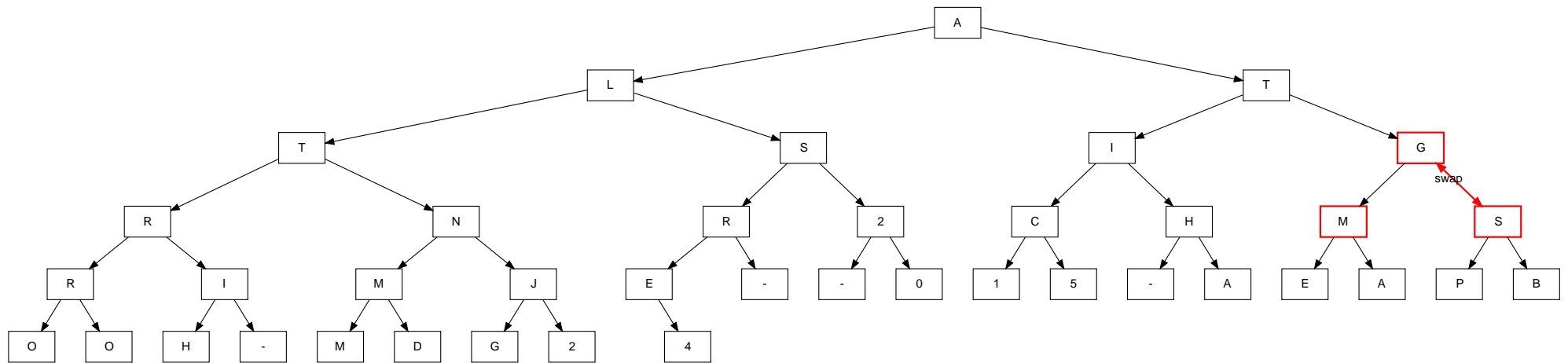
# Step 31: Heapify

[A, L, G, T, S, I, T, R, N, R, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, O, H, -, M, D, G, 2, 4]



# Step 32: Heapify

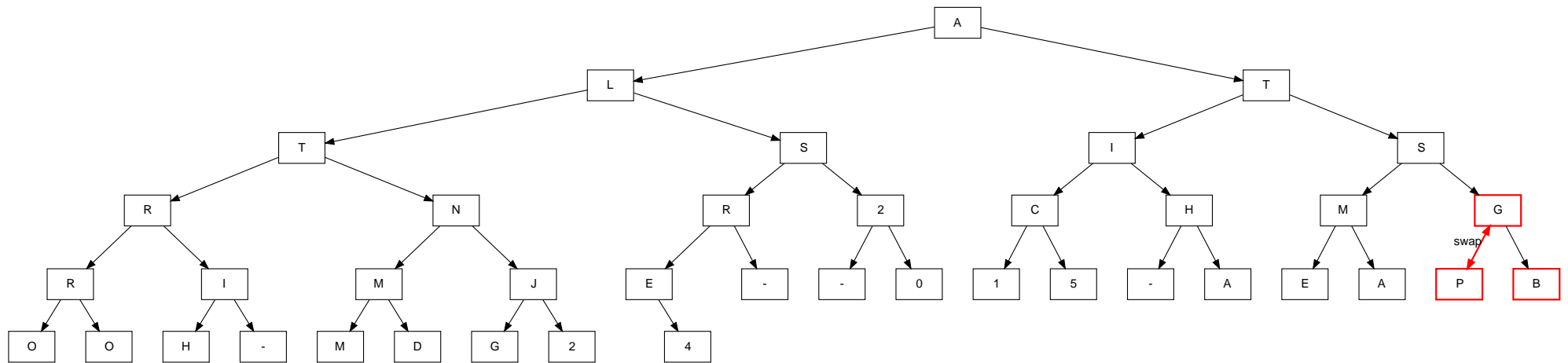
[A, L, T, T, S, I, G, R, N, R, 2, C, H, M, S, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, O, H, -, M, D, G, 2, 4]





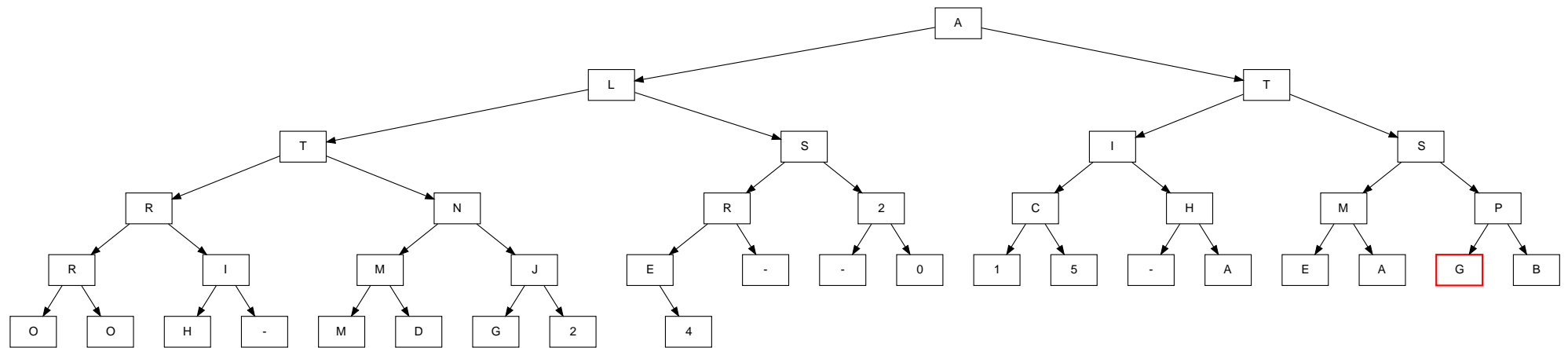
### Step 33: Heapify

[A, L, T, T, S, I, S, R, N, R, 2, C, H, M, G, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, P, B, O, O, H, -, M, D, G, 2, 4]



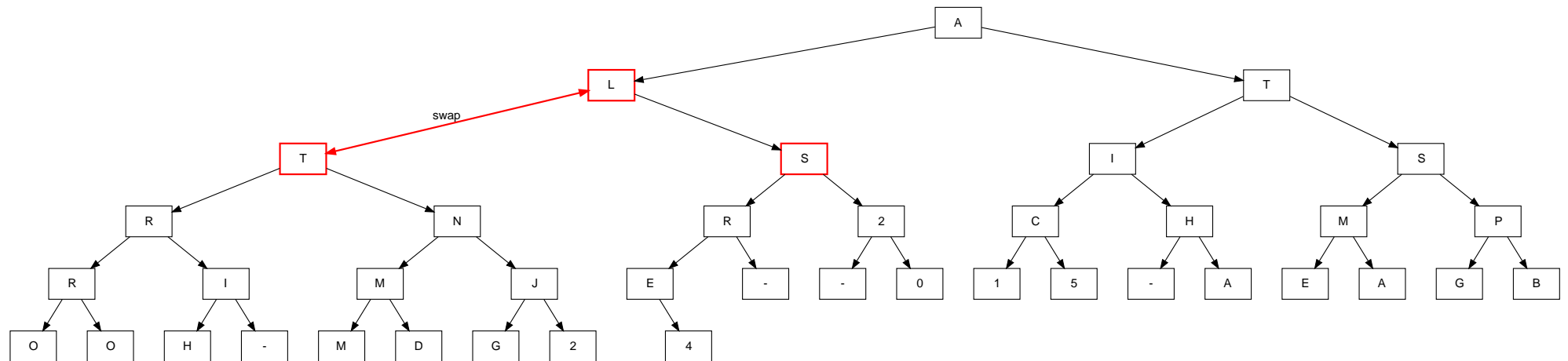
# Step 34: Heapify

[A, L, T, T, S, I, S, R, N, R, 2, C, H, M, P, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, O, O, H, -, M, D, G, 2, 4]



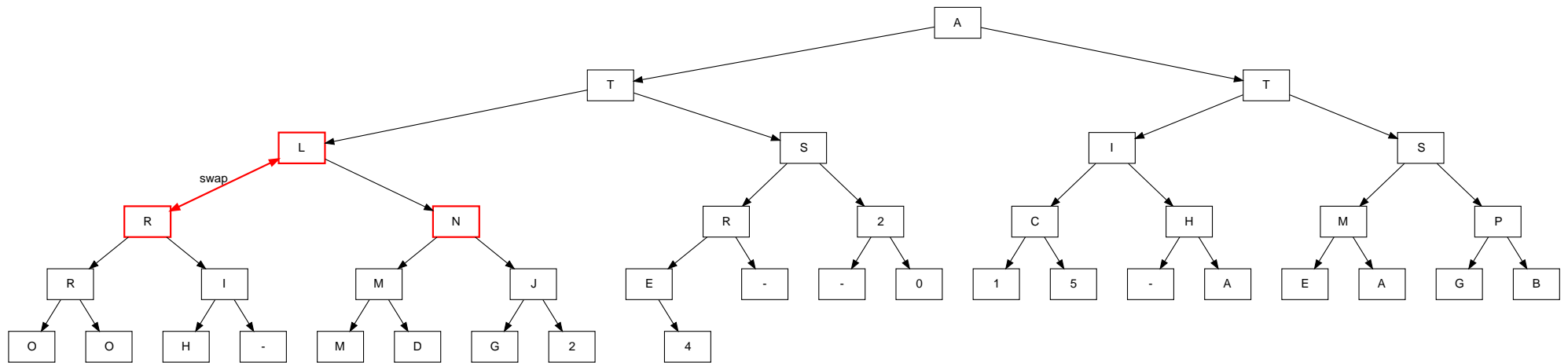
# Step 35: Heapify

[A, L, T, T, S, I, S, R, N, R, 2, C, H, M, P, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, O, O, H, -, M, D, G, 2, 4]



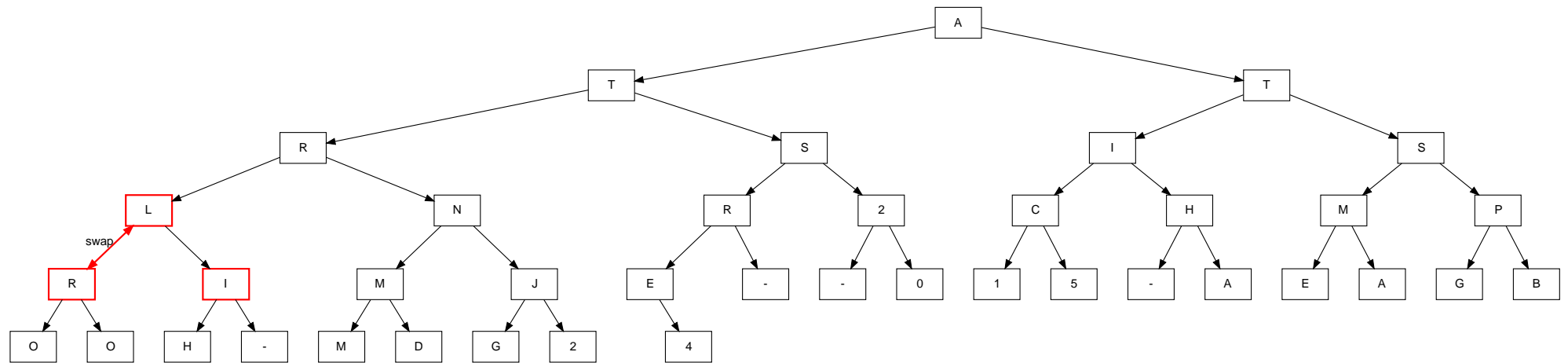
# Step 36: Heapify

[A, T, T, L, S, I, S, R, N, R, 2, C, H, M, P, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, O, O, H, -, M, D, G, 2, 4]



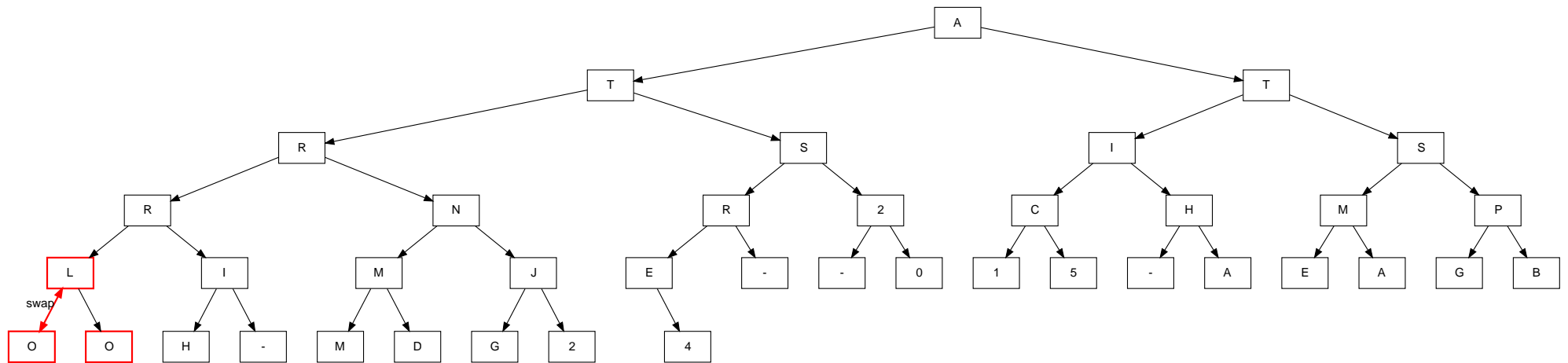
# Step 37: Heapify

[A, T, T, R, S, I, S, L, N, R, 2, C, H, M, P, R, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, O, O, H, -, M, D, G, 2, 4]



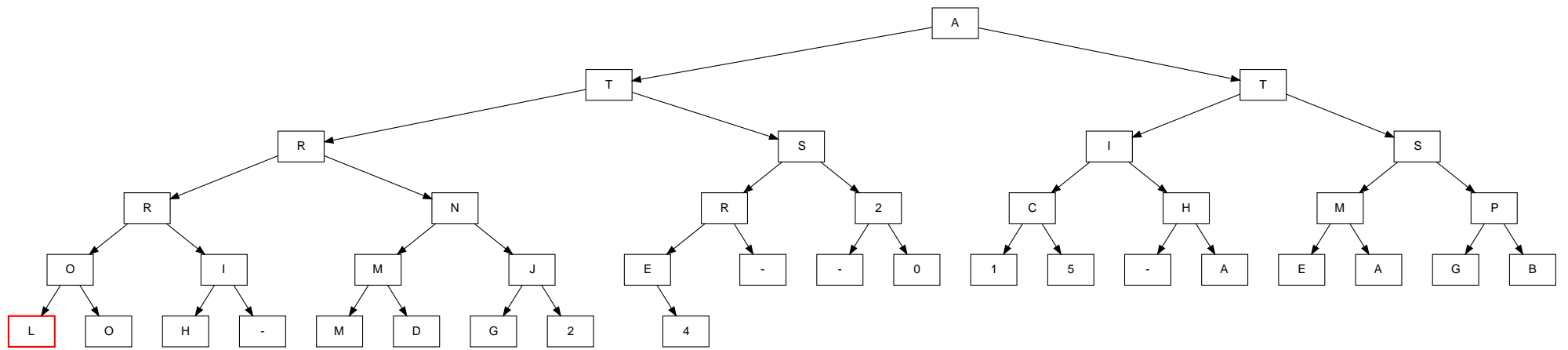
# Step 38: Heapify

[A, T, T, R, S, I, S, R, N, R, 2, C, H, M, P, L, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, O, O, H, -, M, D, G, 2, 4]



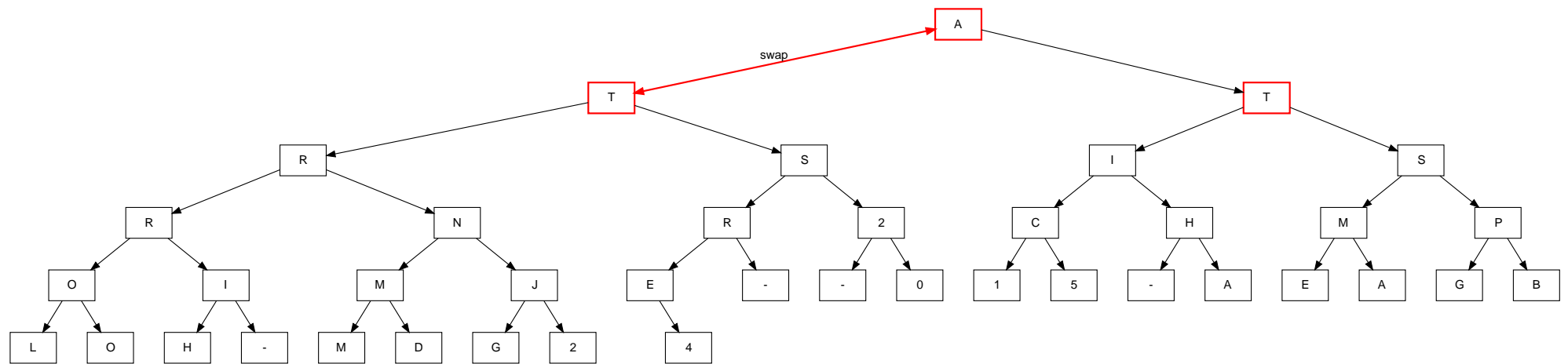
# Step 39: Heapify

[A, T, T, R, S, I, S, R, N, R, 2, C, H, M, P, O, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]



# Step 40: Heapify

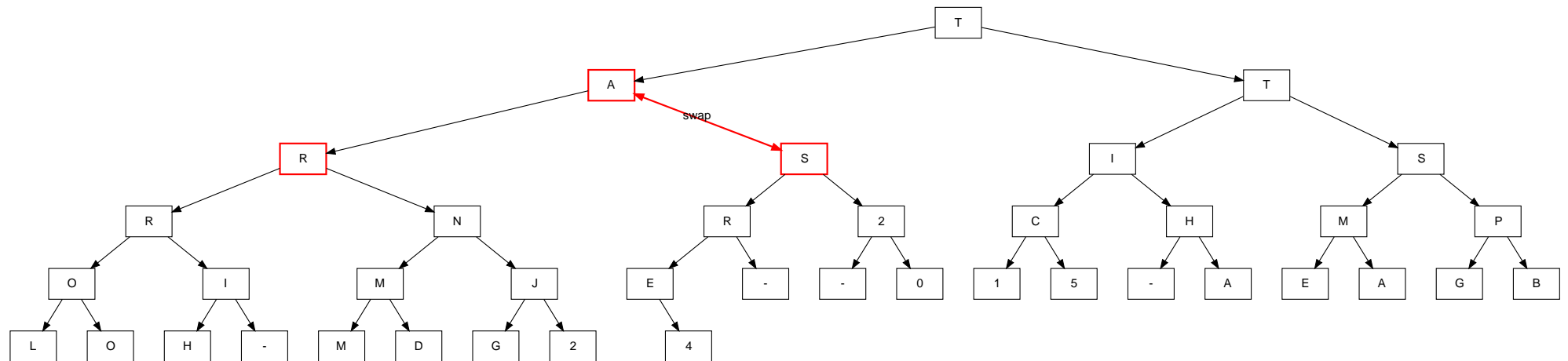
[A, T, T, R, S, I, S, R, N, R, 2, C, H, M, P, O, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]





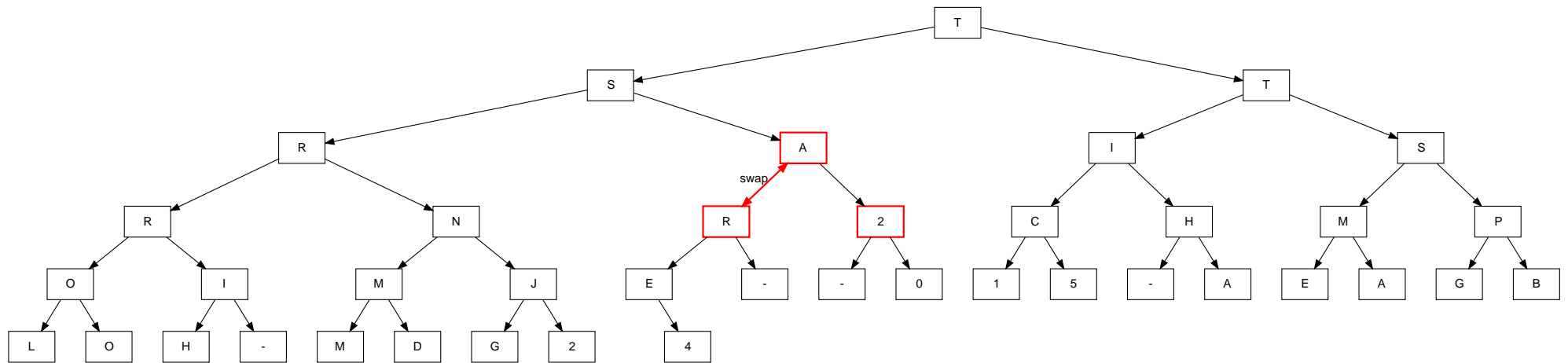
# Step 41: Heapify

[T, A, T, R, S, I, S, R, N, R, 2, C, H, M, P, O, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]



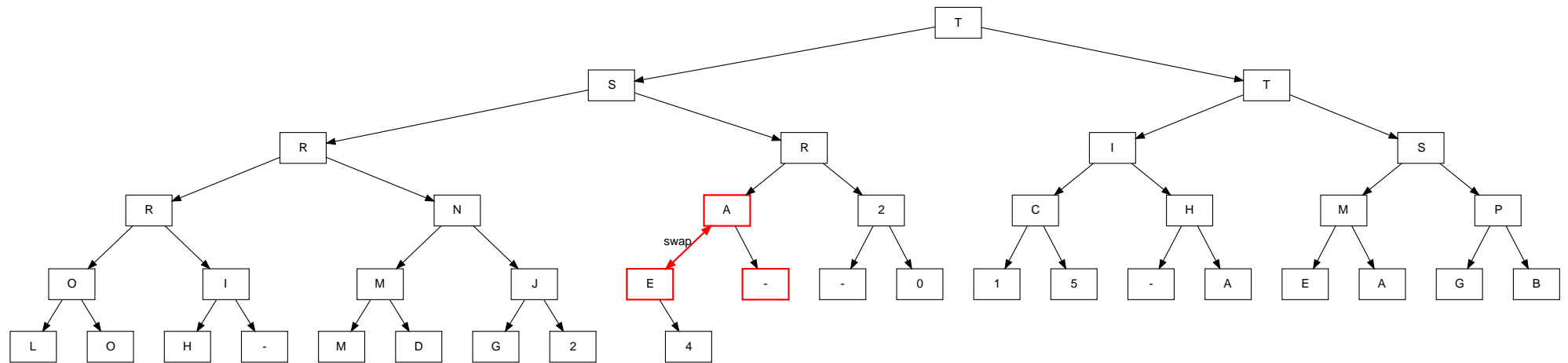
# Step 42: Heapify

[T, S, T, R, A, I, S, R, N, R, 2, C, H, M, P, O, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]



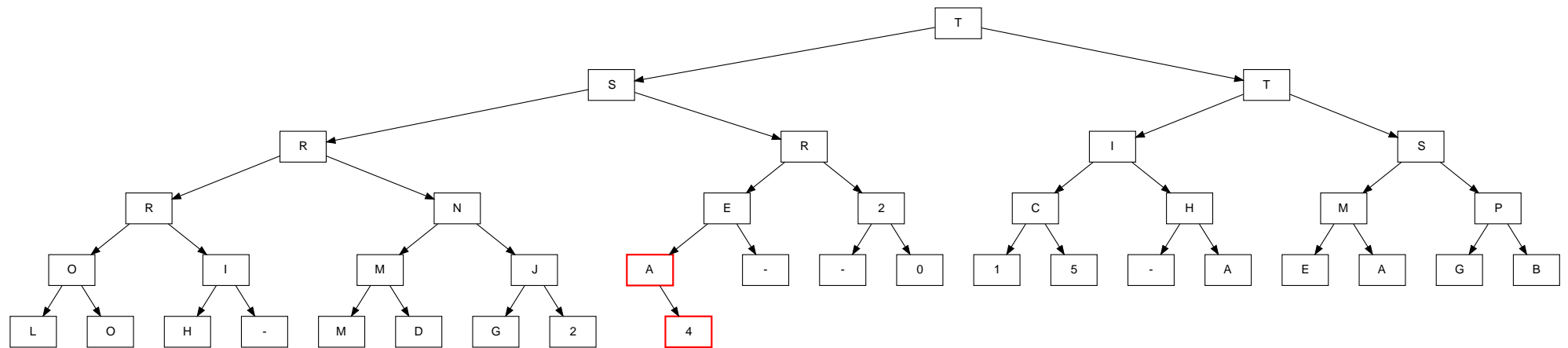
# Step 43: Heapify

[T, S, T, R, R, I, S, R, N, A, 2, C, H, M, P, O, I, M, J, E, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]



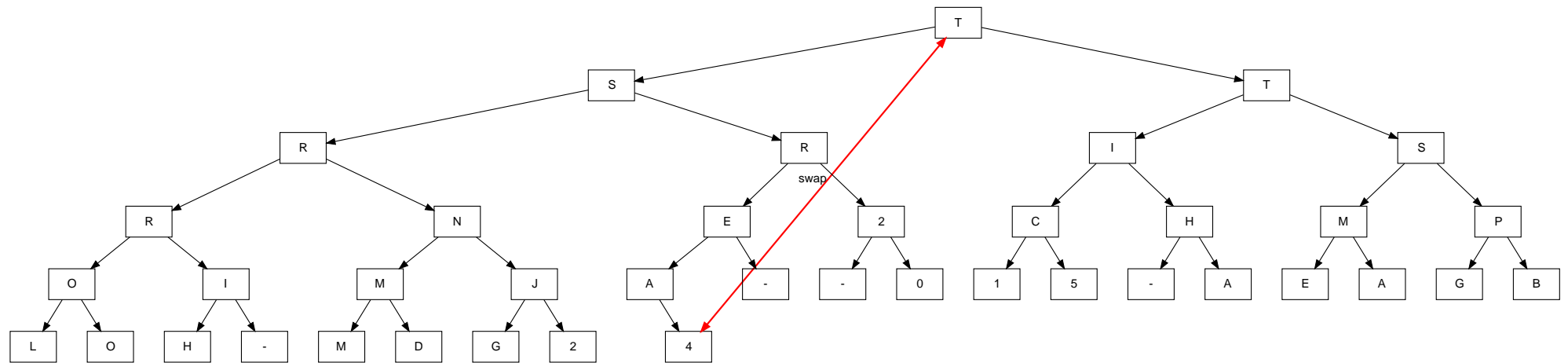
# Step 44: Heapify

[T, S, T, R, R, I, S, R, N, E, 2, C, H, M, P, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]



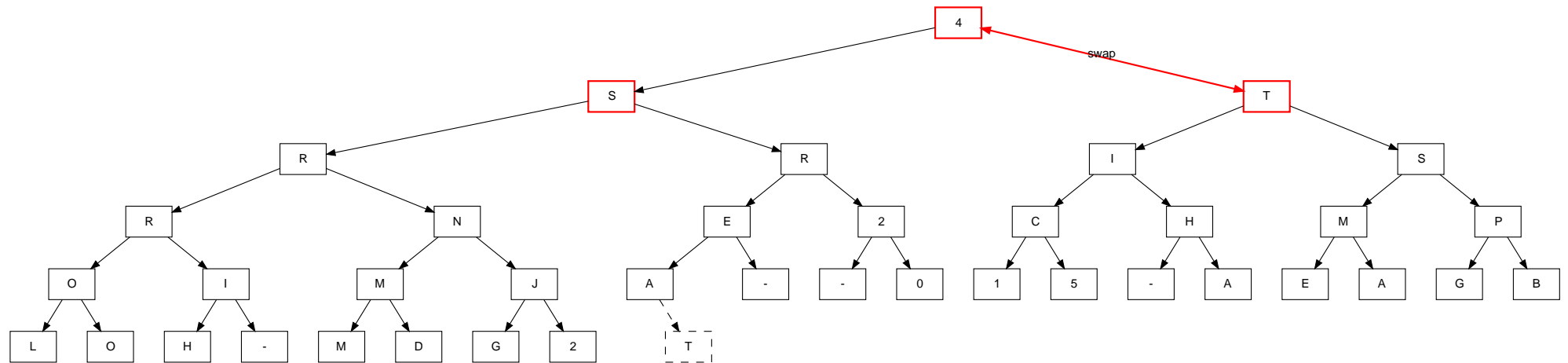
# Step 45: Sort-swap

[T, S, T, R, R, I, S, R, N, E, 2, C, H, M, P, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2, 4]



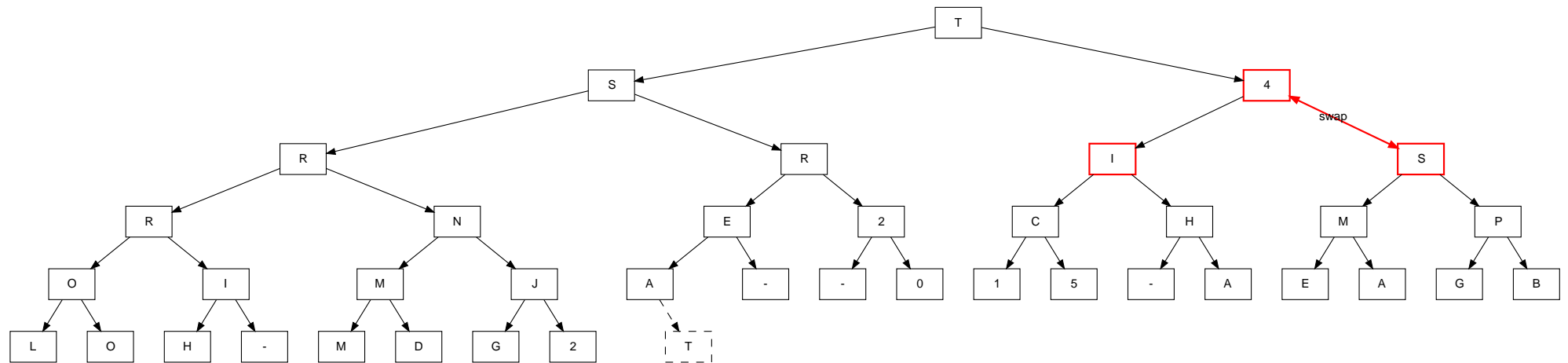
# Step 46: Heapify

[4, S, T, R, R, I, S, R, N, E, 2, C, H, M, P, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2 || T]



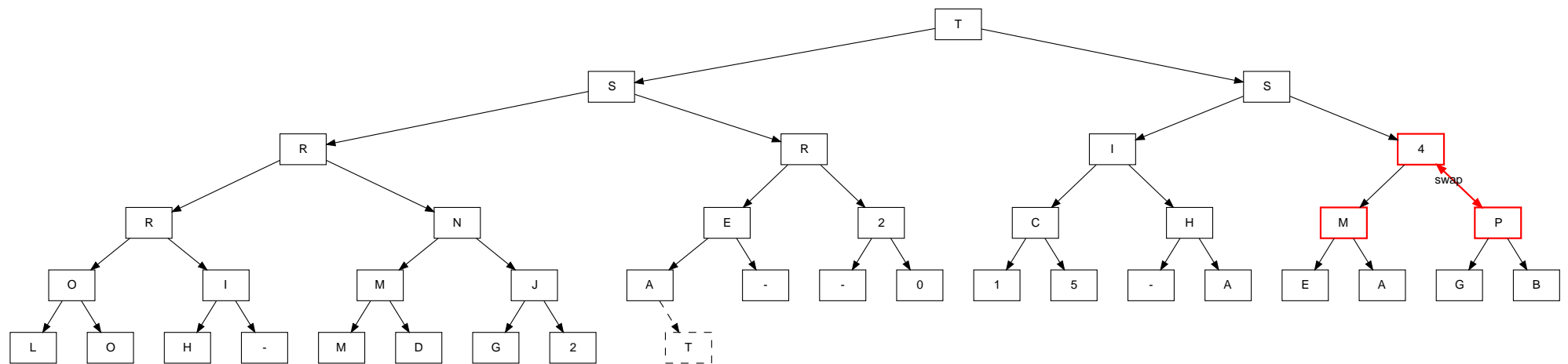
# Step 47: Heapify

[T, S, 4, R, R, I, S, R, N, E, 2, C, H, M, P, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2 || T]



# Step 48: Heapify

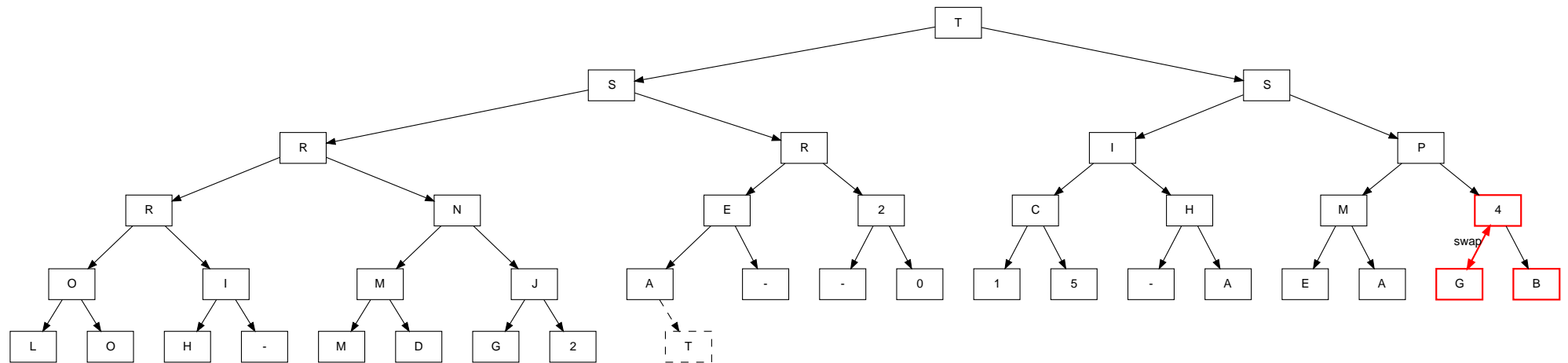
[T, S, S, R, R, I, 4, R, N, E, 2, C, H, M, P, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2 || T]





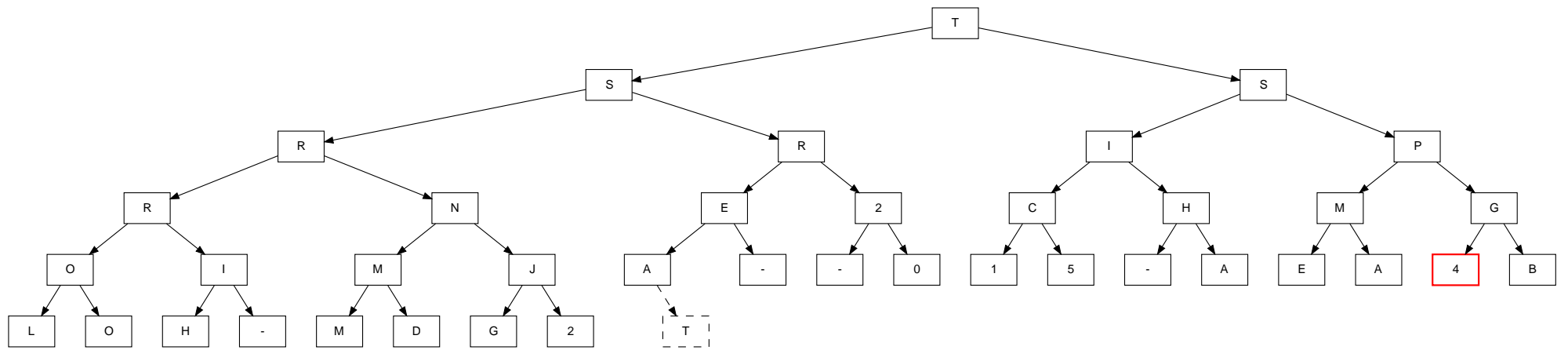
# Step 49: Heapify

[T, S, S, R, R, I, P, R, N, E, 2, C, H, M, 4, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, G, B, L, O, H, -, M, D, G, 2 || T]



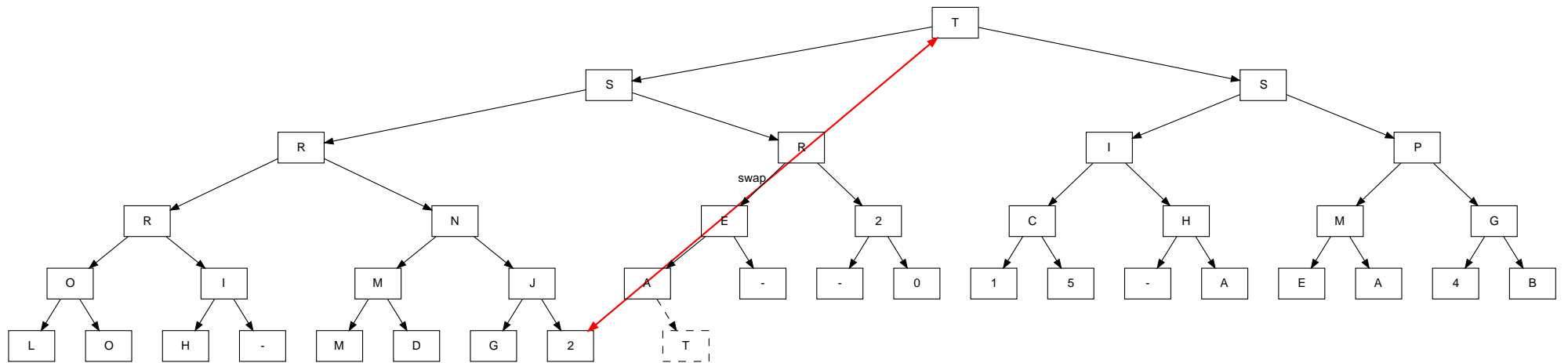
# Step 50: Heapify

[T, S, S, R, R, I, P, R, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G, 2 ||  
T]



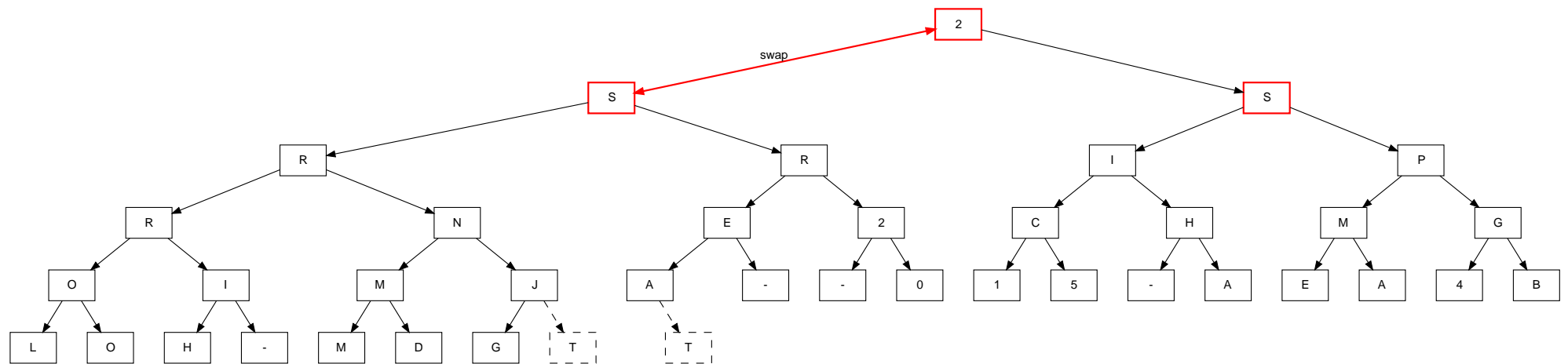
# Step 51: Sort-swap

[T, S, S, R, R, I, P, R, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G, 2 || T]



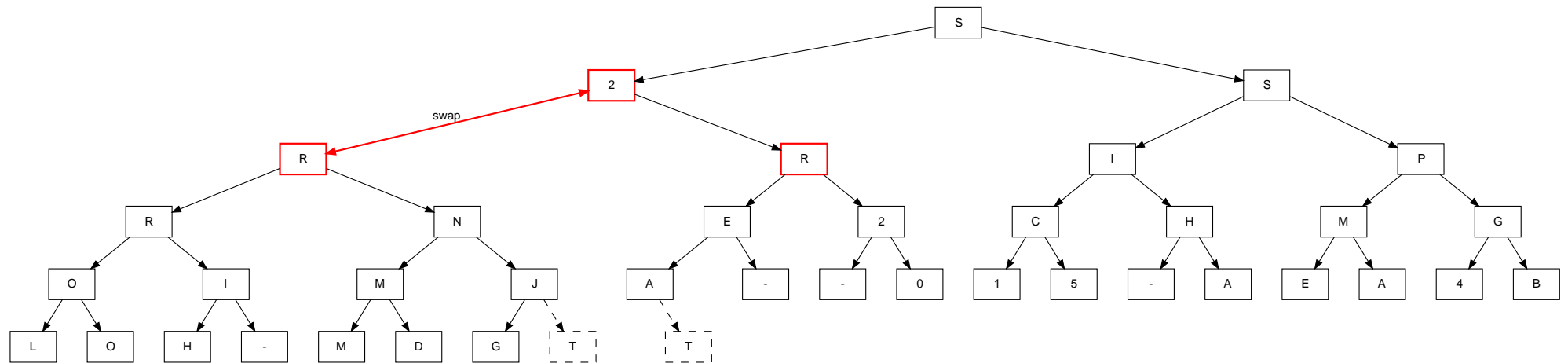
# Step 52: Heapify

[2, S, S, R, R, I, P, R, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G || T,  
T]



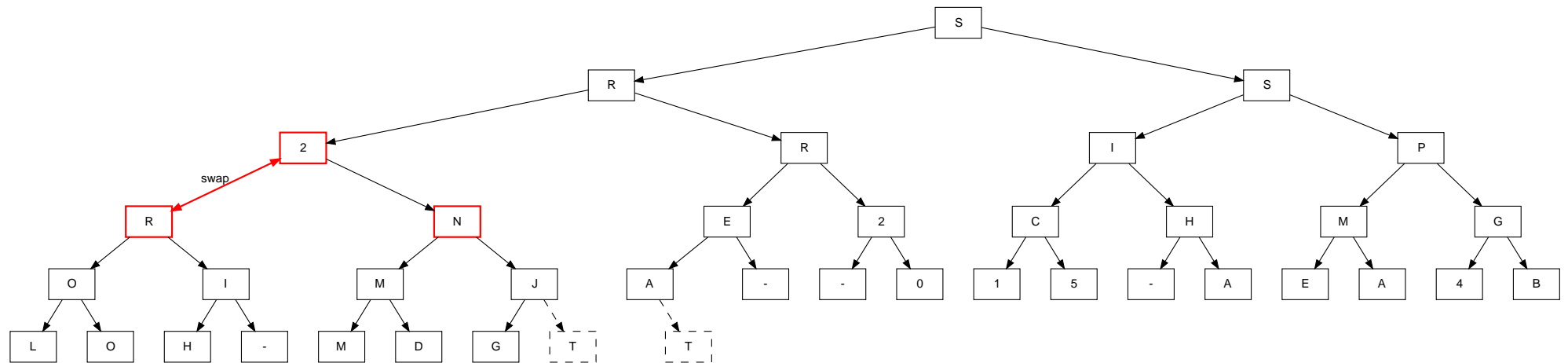
# Step 53: Heapify

[S, 2, S, R, R, I, P, R, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G || T,  
T]



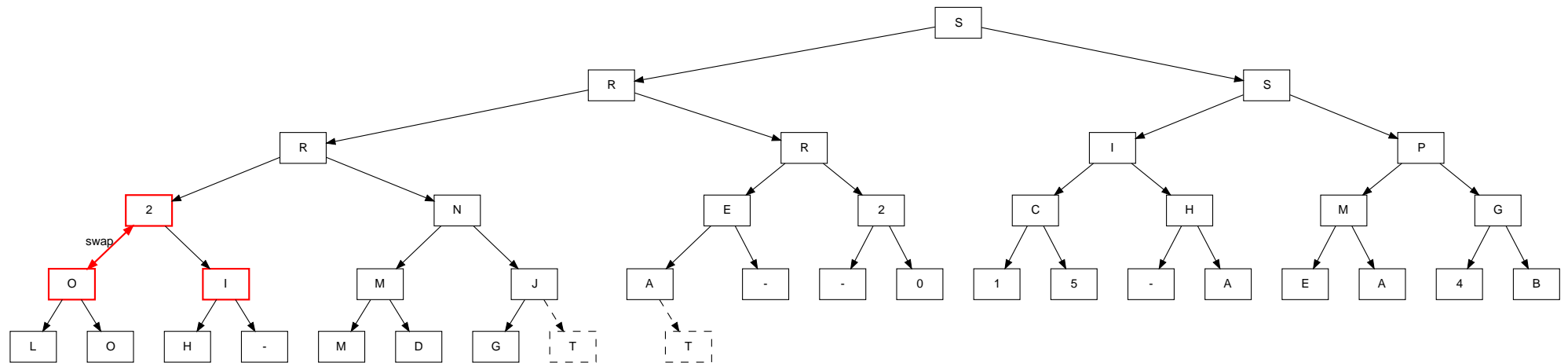
# Step 54: Heapify

[S, R, S, 2, R, I, P, R, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G || T,  
T]



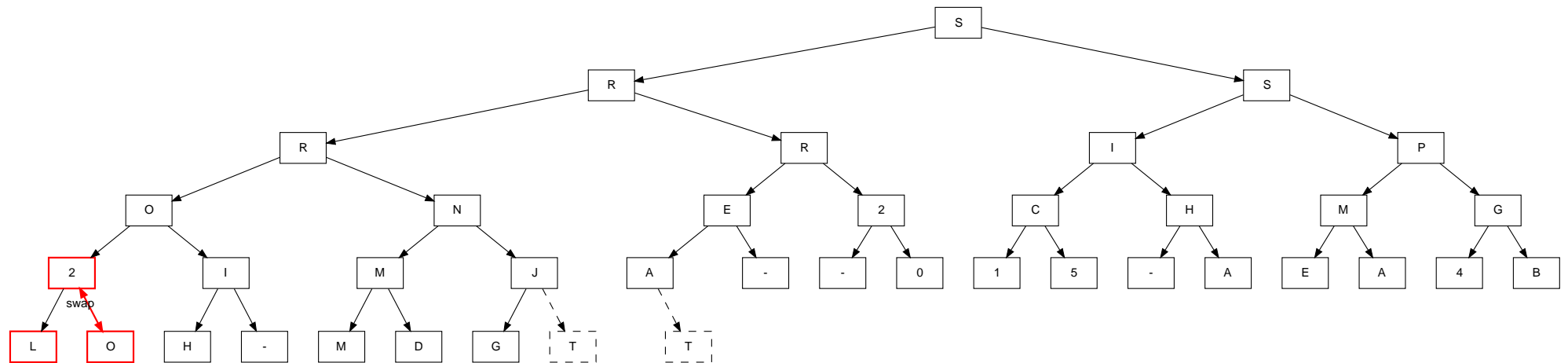
# Step 55: Heapify

[S, R, S, R, R, I, P, 2, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G || T,  
T]



# Step 56: Heapify

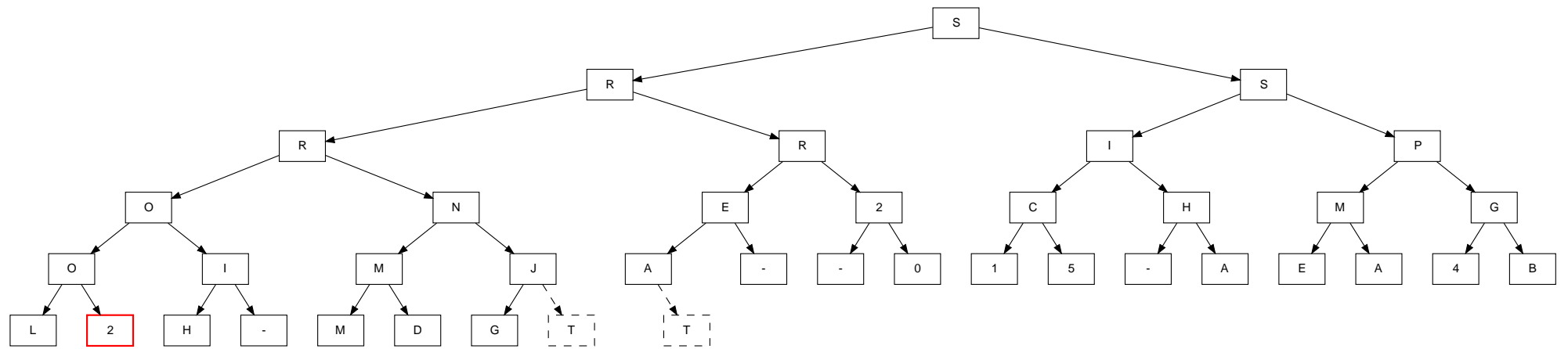
[S, R, S, R, R, I, P, O, N, E, 2, C, H, M, G, 2, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, O, H, -, M, D, G || T,  
T]





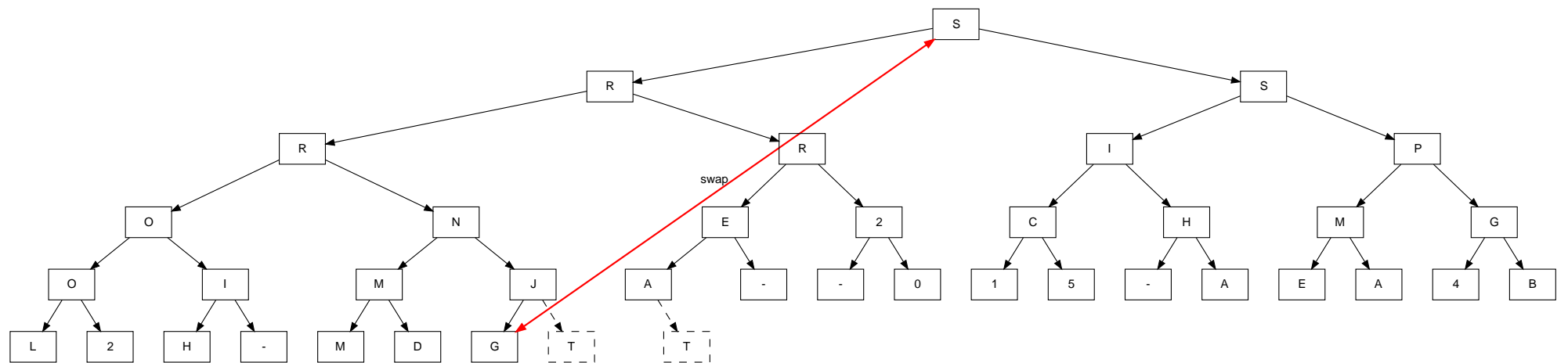
# Step 57: Heapify

[S, R, S, R, R, I, P, O, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D, G || T,  
T]



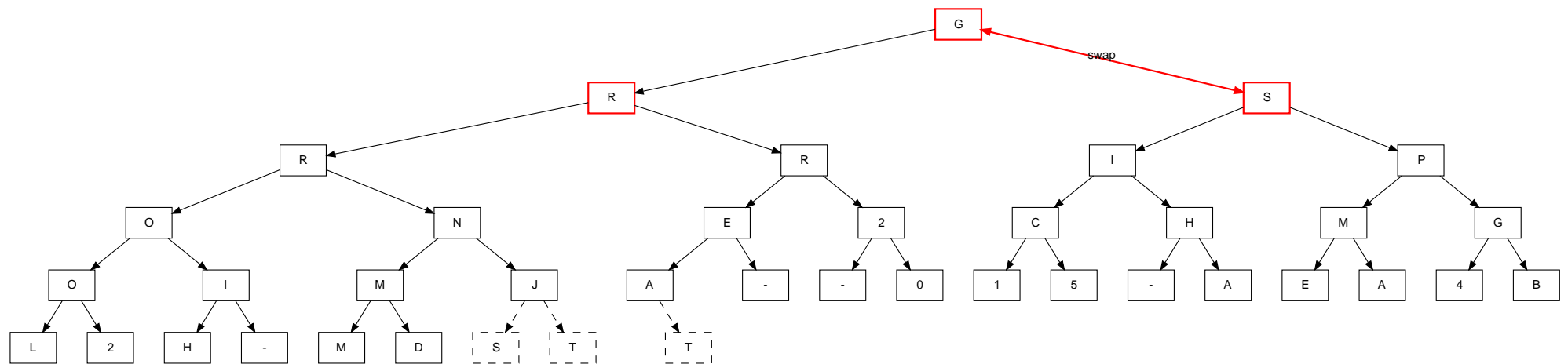
# Step 58: Sort-swap

[S, R, S, R, R, I, P, O, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D, G || T,  
T]



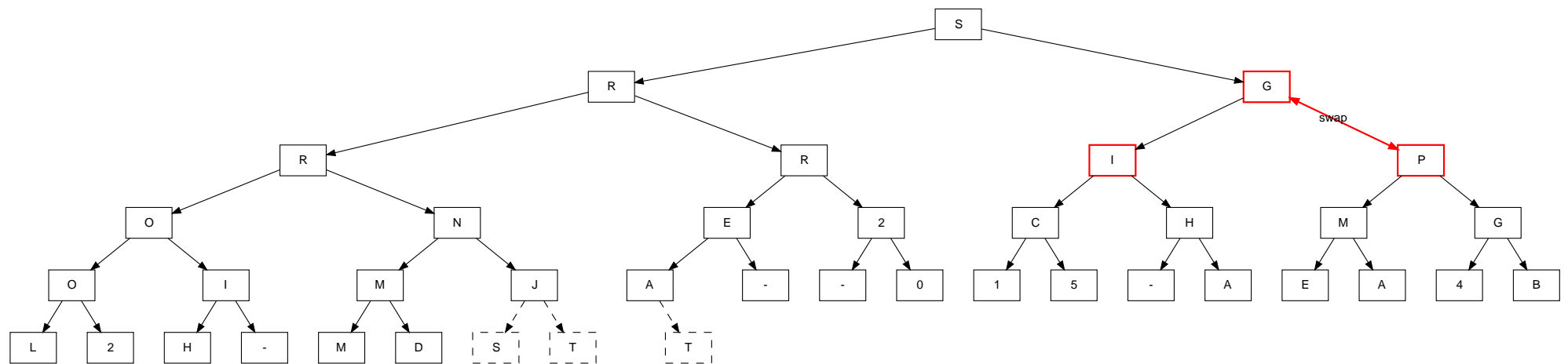
# Step 59: Heapify

[G, R, S, R, R, I, P, O, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D || S, T, T]



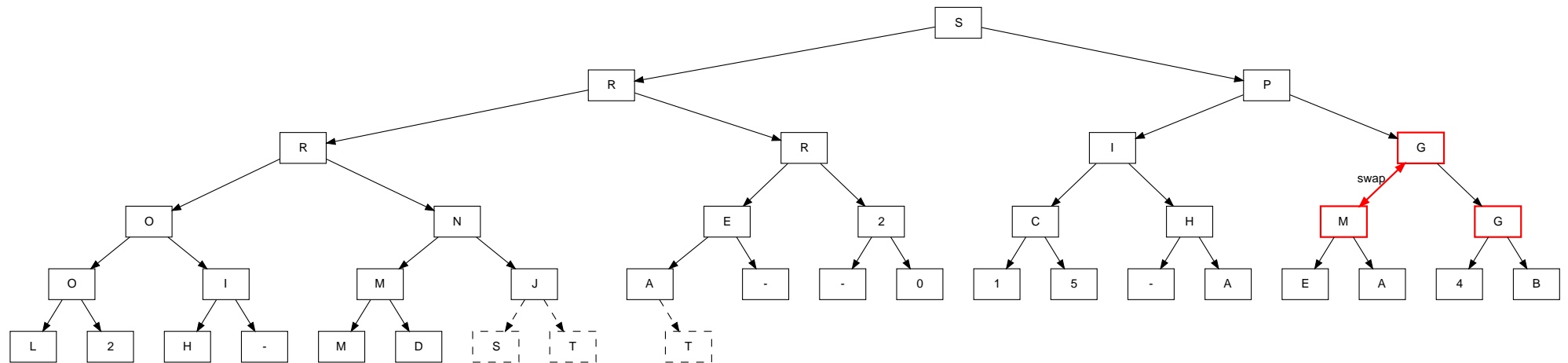
# Step 60: Heapify

[S, R, G, R, R, I, P, O, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D || S, T, T]



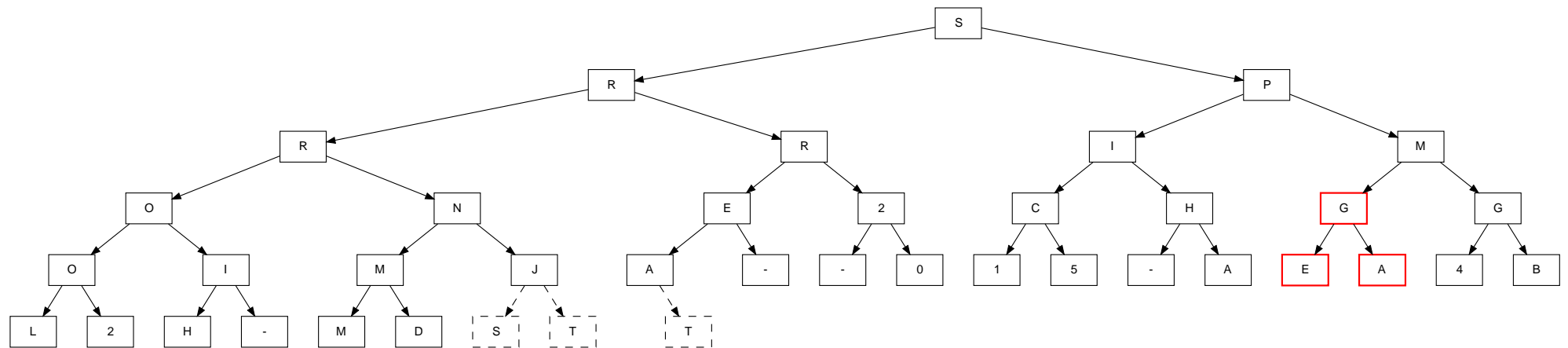
# Step 61: Heapify

[S, R, P, R, R, I, G, O, N, E, 2, C, H, M, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D || S, T, T]



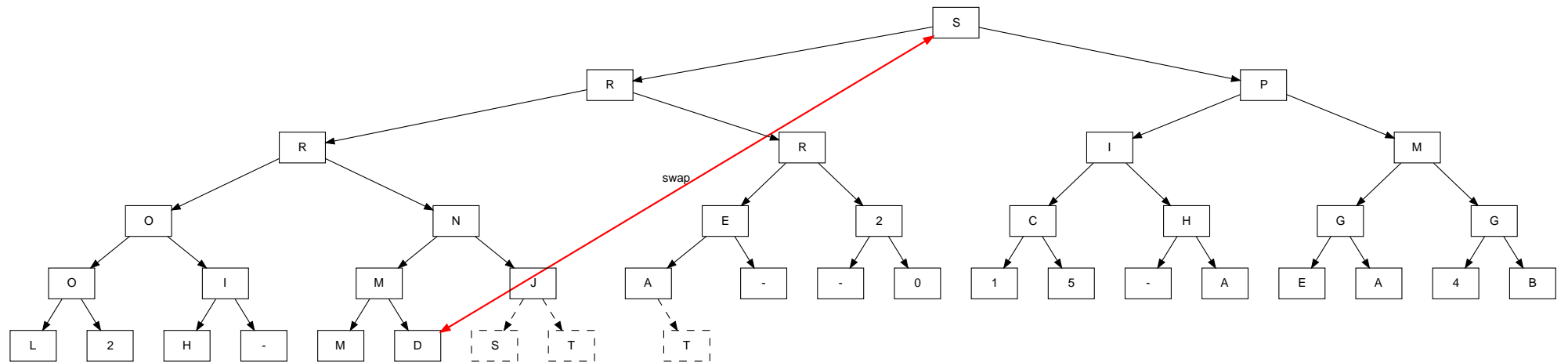
# Step 62: Heapify

[S, R, P, R, R, I, M, O, N, E, 2, C, H, G, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D || S, T, T]



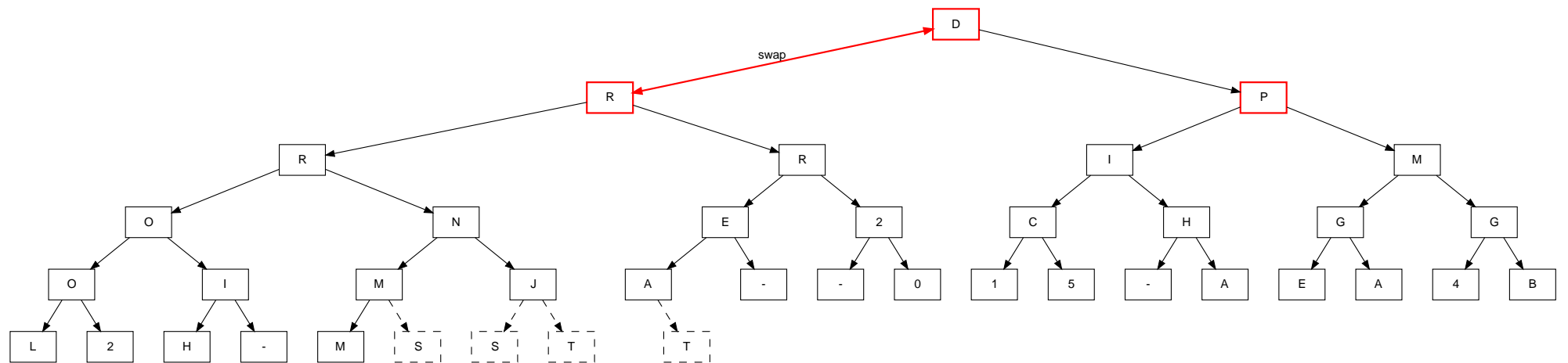
# Step 63: Sort-swap

[S, R, P, R, R, I, M, O, N, E, 2, C, H, G, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M, D || S, T, T]



# Step 64: Heapify

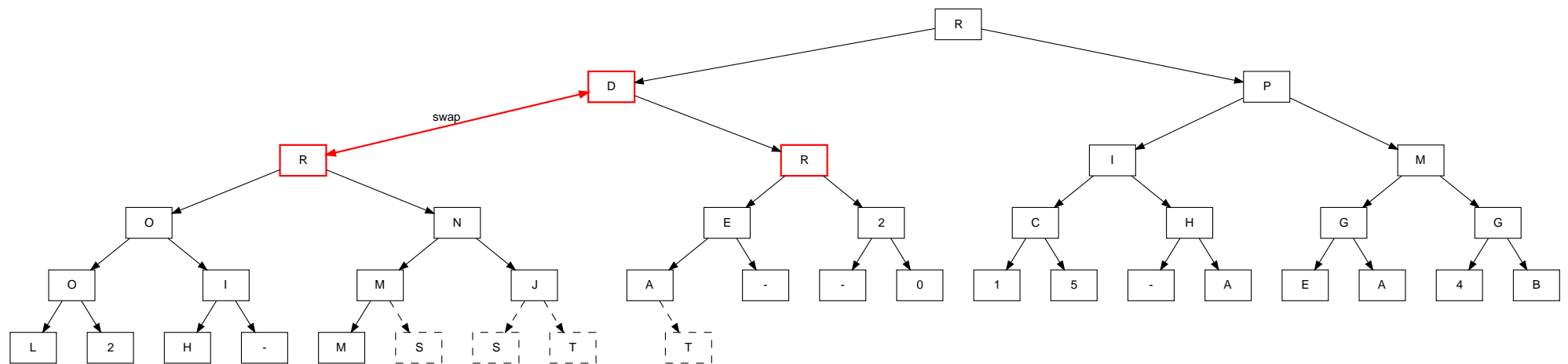
[D, R, P, R, R, I, M, O, N, E, 2, C, H, G, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M || S, S, T, T]





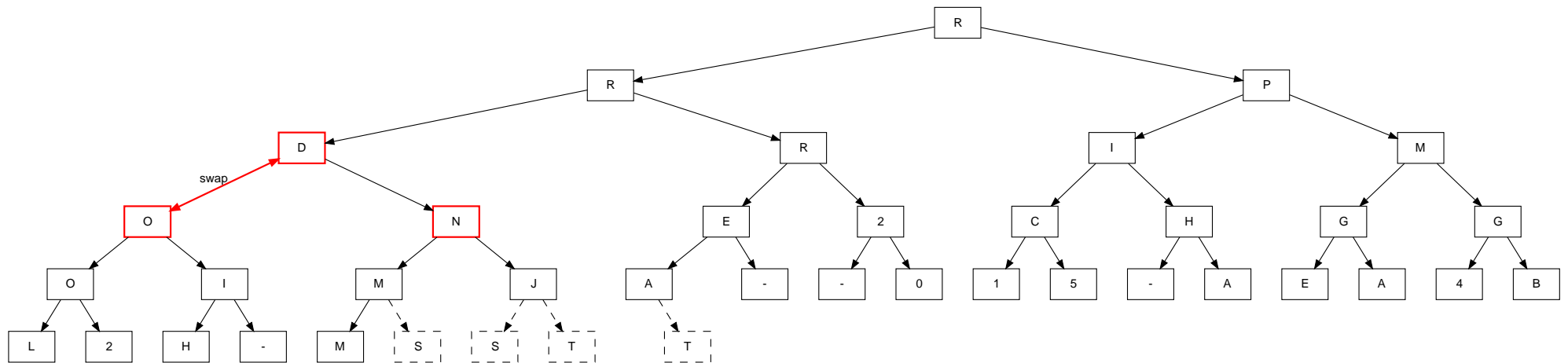
# Step 65: Heapify

[R, D, P, R, R, I, M, O, N, E, 2, C, H, G, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M || S, S, T, T]



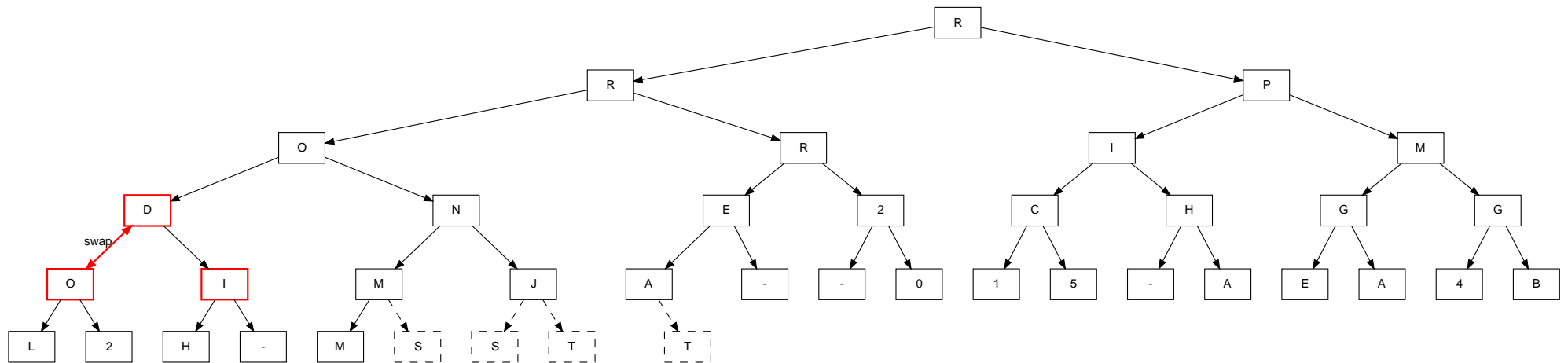
# Step 66: Heapify

[R, R, P, D, R, I, M, O, N, E, 2, C, H, G, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M || S, S, T, T]



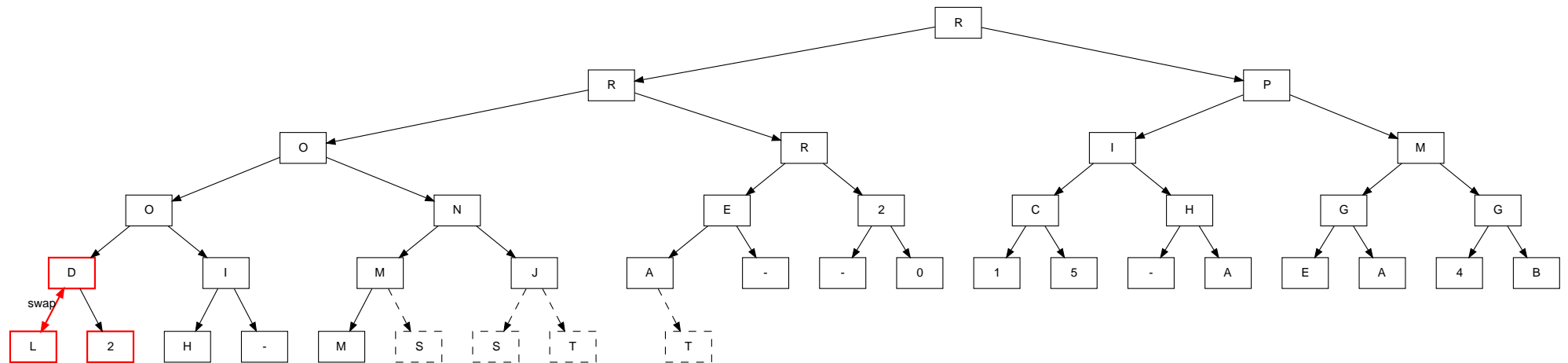
# Step 67: Heapify

[R, R, P, O, R, I, M, D, N, E, 2, C, H, G, G, O, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M || S, S, T, T]



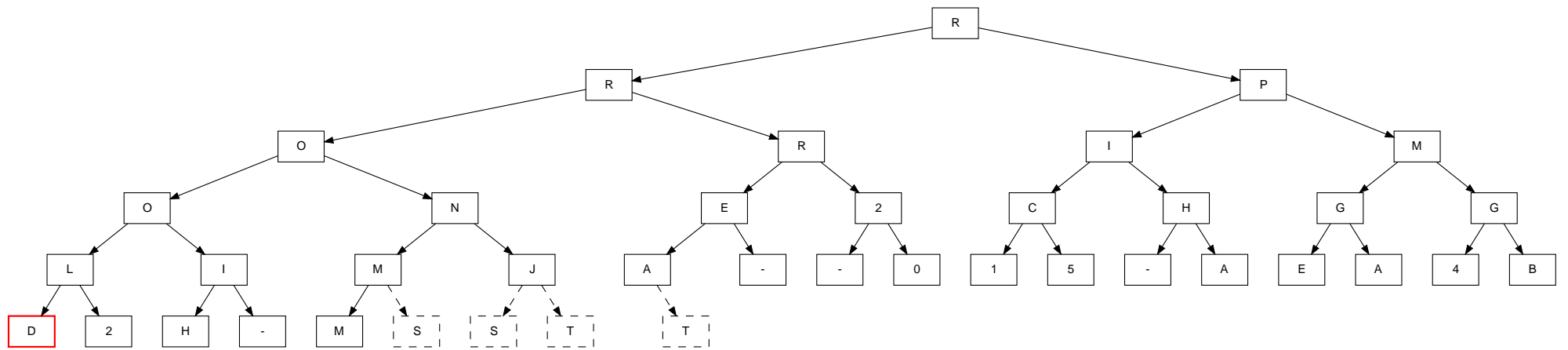
# Step 68: Heapify

[R, R, P, O, R, I, M, O, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, L, 2, H, -, M || S, S, T, T]



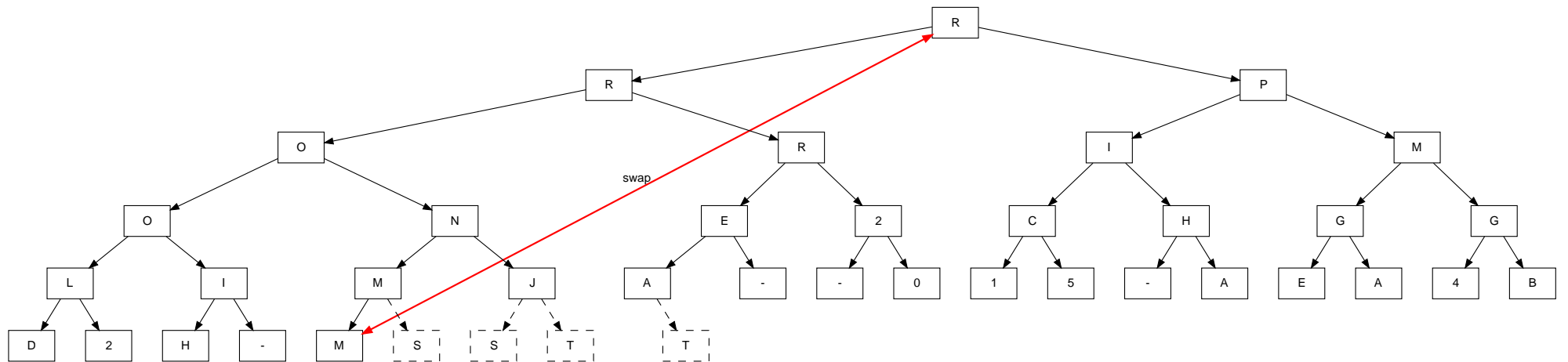
# Step 69: Heapify

[R, R, P, O, R, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H, -, M || S, S, T, T]



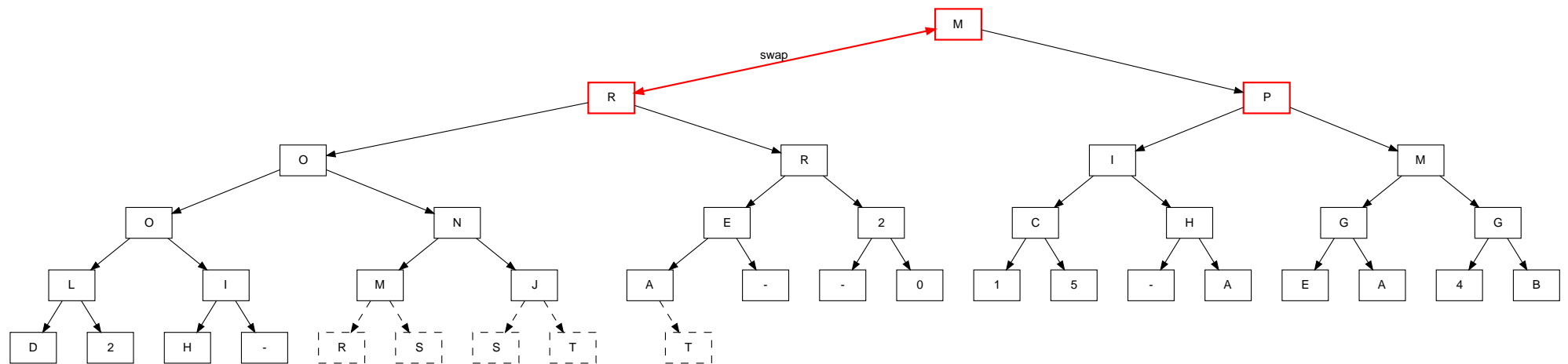
# Step 70: Sort-swap

[R, R, P, O, R, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H, -, M || S, S, T, T]



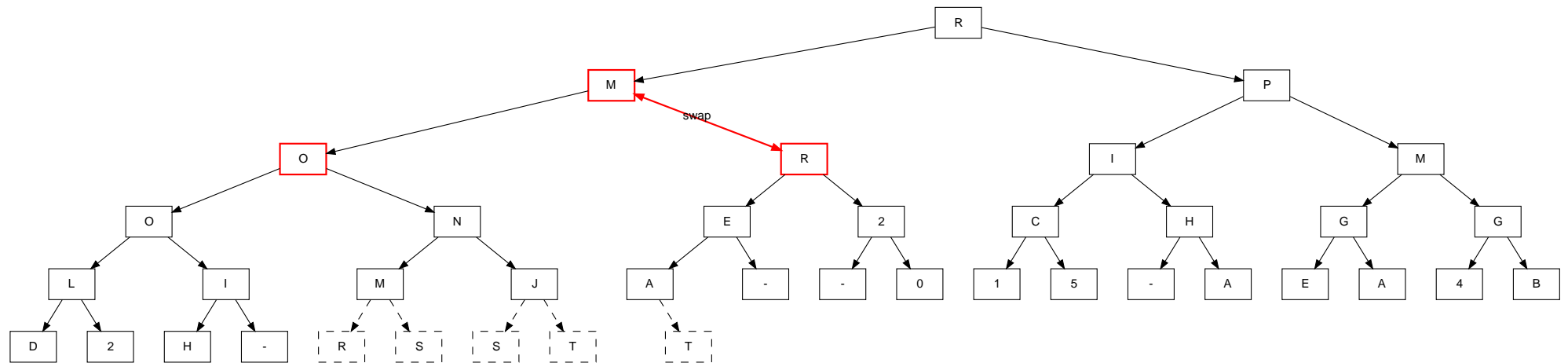
# Step 71: Heapify

[M, R, P, O, R, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H, - || R, S, S, T, T]



# Step 72: Heapify

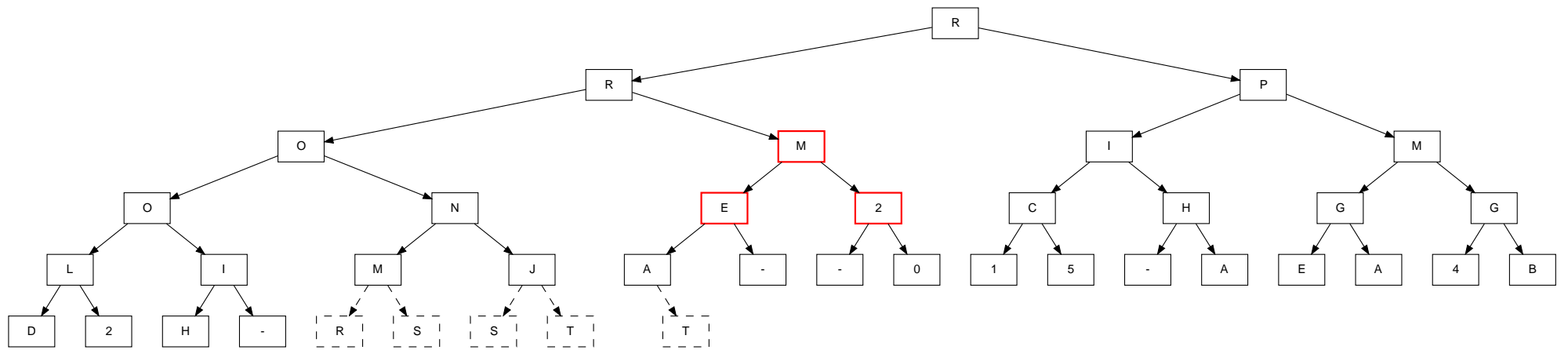
[R, M, P, O, R, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H, - || R, S, S, T, T]





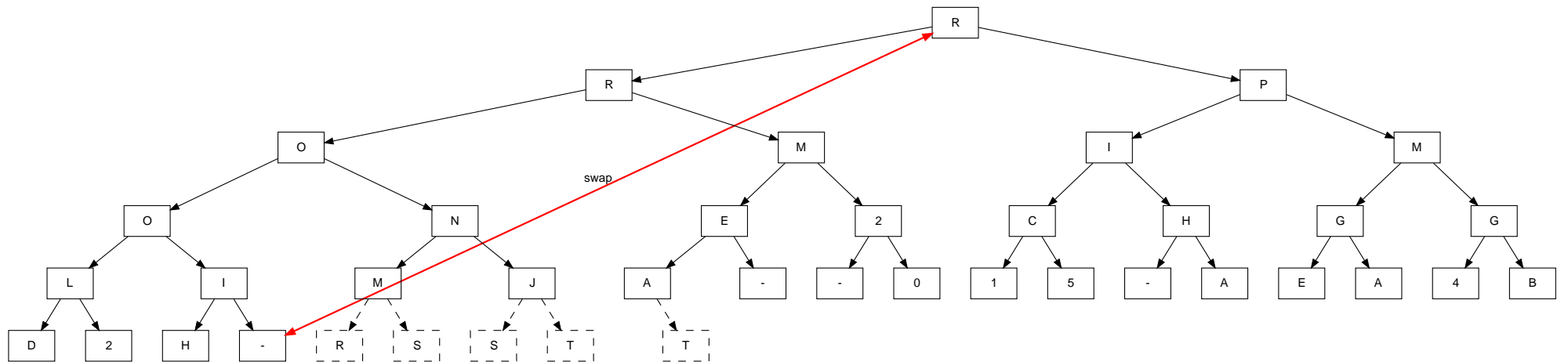
# Step 73: Heapify

[R, R, P, O, M, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H, - || R, S, S, T, T]



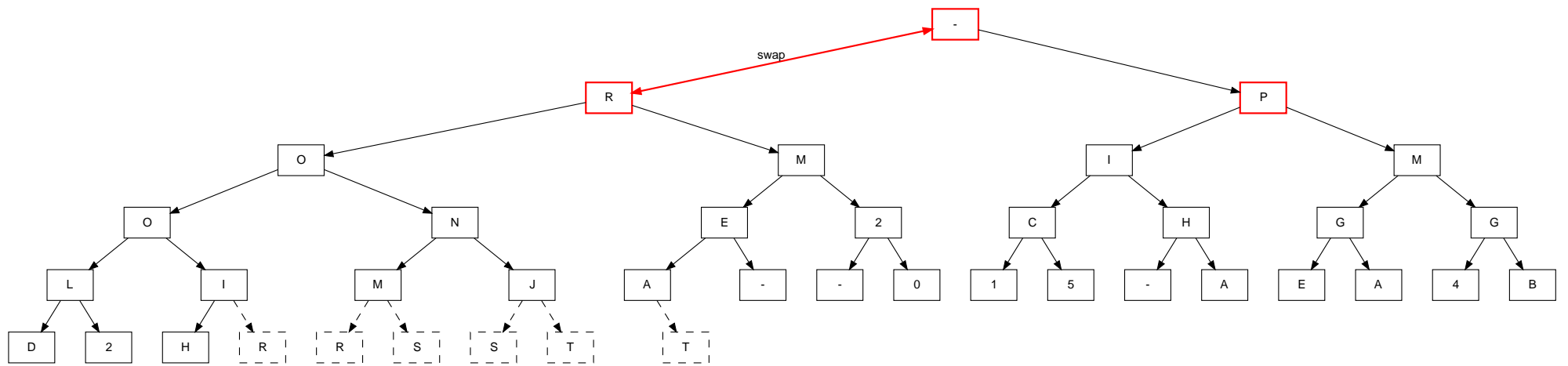
# Step 74: Sort-swap

[R, R, P, O, M, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H, - || R, S, S, T, T]



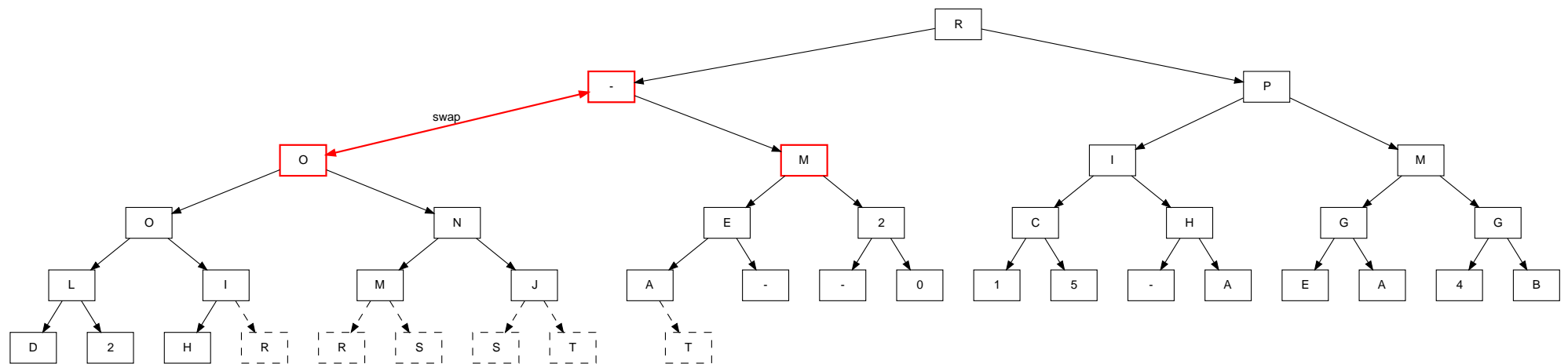
# Step 75: Heapify

[-, R, P, O, M, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H || R, R, S, S, T, T]



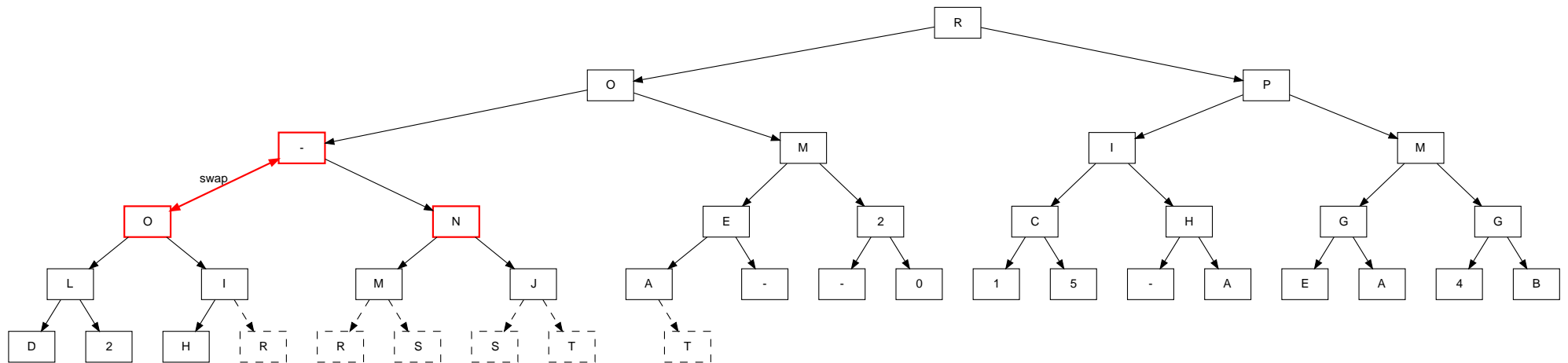
# Step 76: Heapify

[R, -, P, O, M, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H || R, R, S, S, T, T]



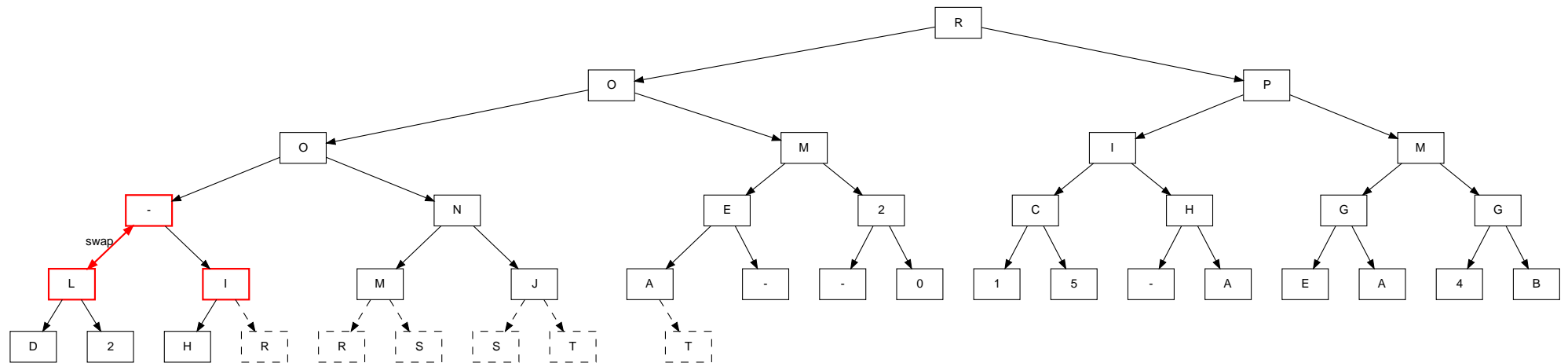
# Step 77: Heapify

[R, O, P, -, M, I, M, O, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H || R, R, S, S, T, T]



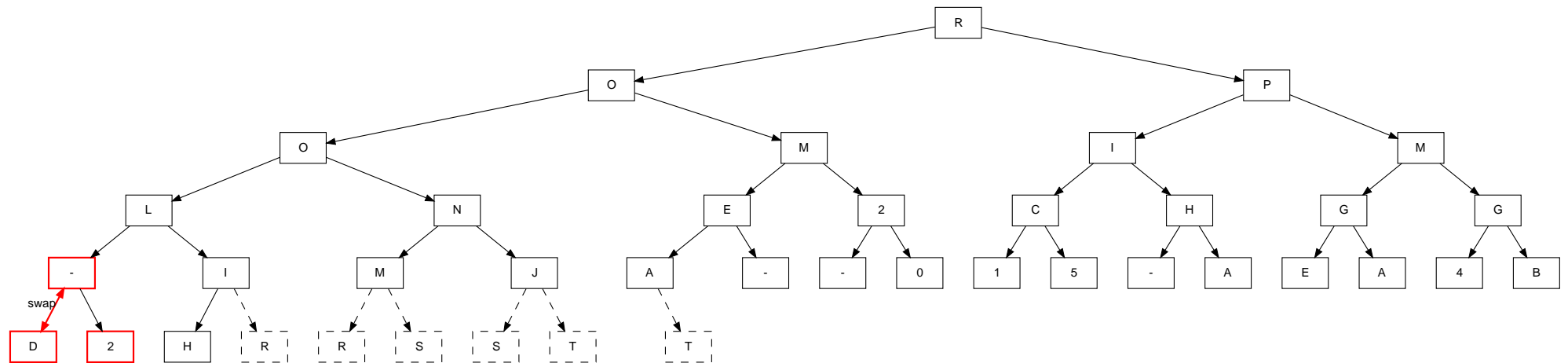
# Step 78: Heapify

[R, O, P, O, M, I, M, -, N, E, 2, C, H, G, G, L, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H || R, R, S, S, T, T]



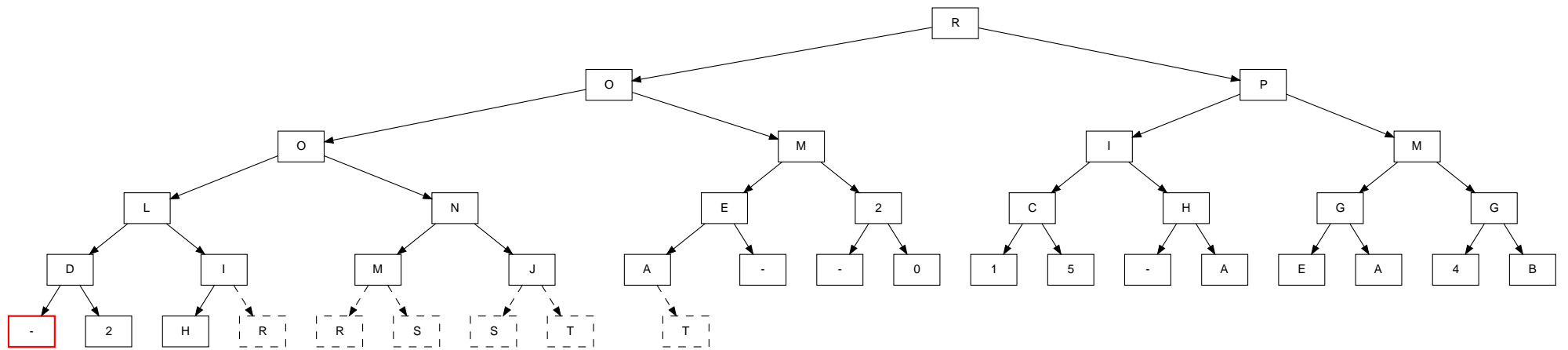
# Step 79: Heapify

[R, O, P, O, M, I, M, L, N, E, 2, C, H, G, G, -, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, D, 2, H || R, R, S, S, T, T]



# Step 80: Heapify

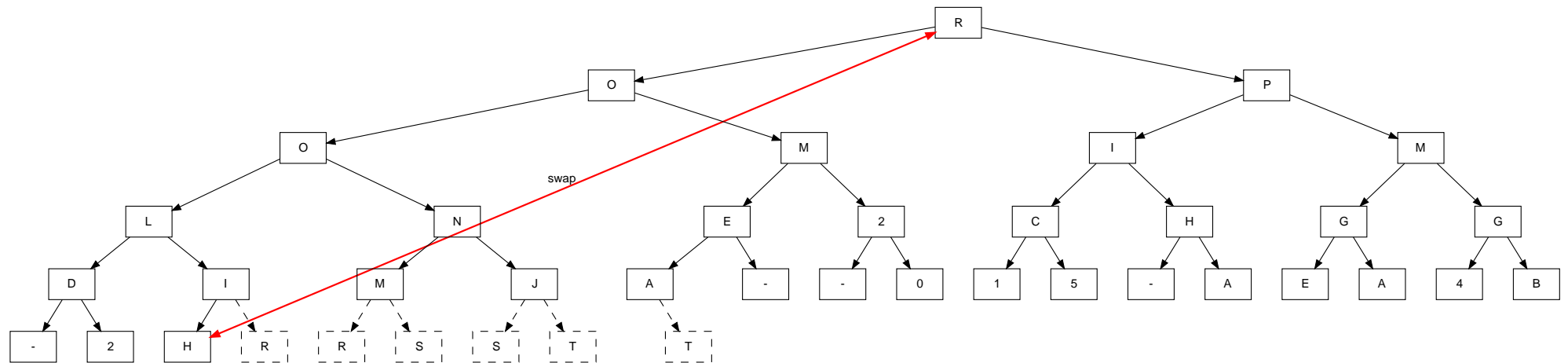
[R, O, P, O, M, I, M, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, -, 2, H || R, R, S, S, T, T]





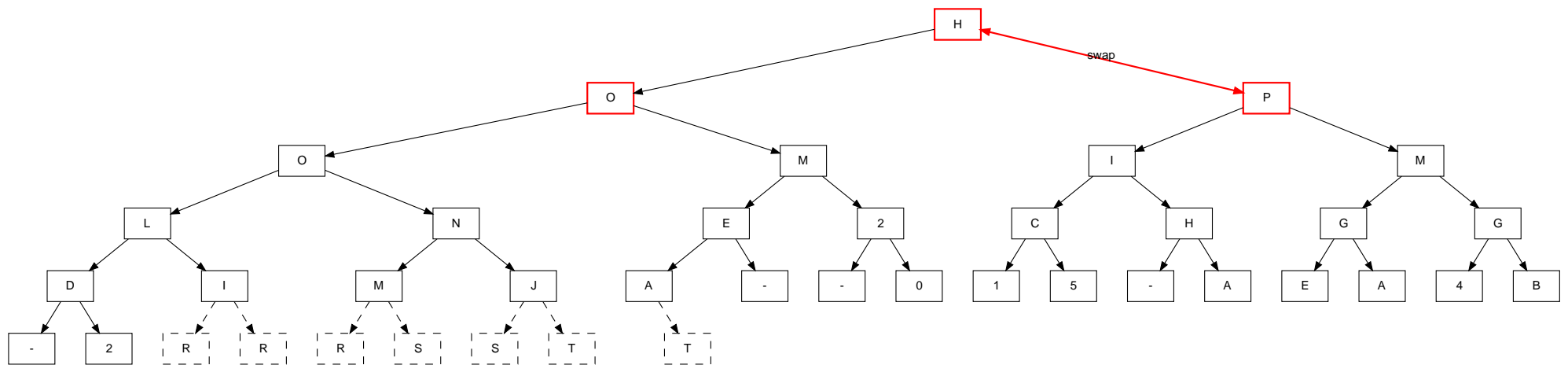
# Step 81: Sort-swap

[R, O, P, O, M, I, M, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, -, 2, H || R, R, S, S, T, T]



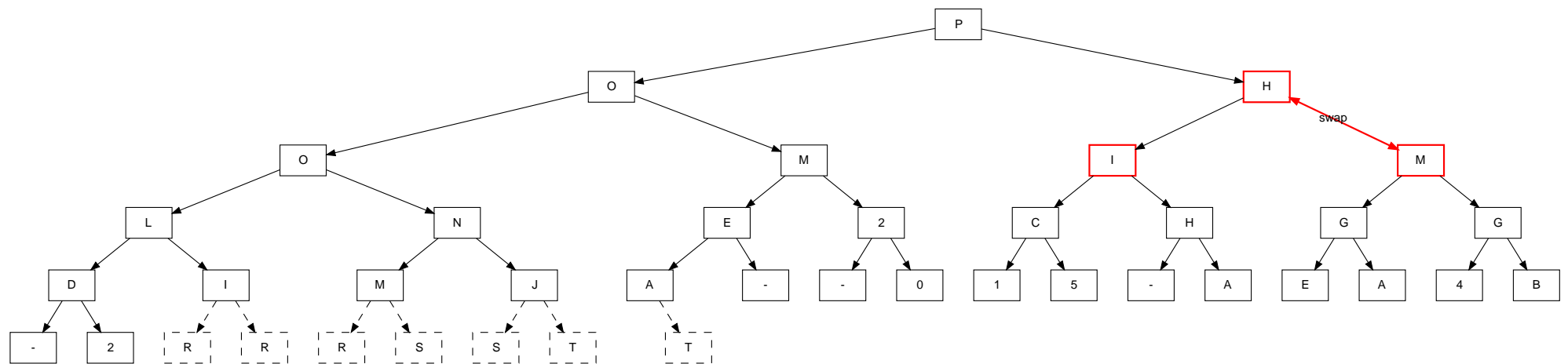
# Step 82: Heapify

[H, O, P, O, M, I, M, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, -, 2 || R, R, R, S, S, T, T]



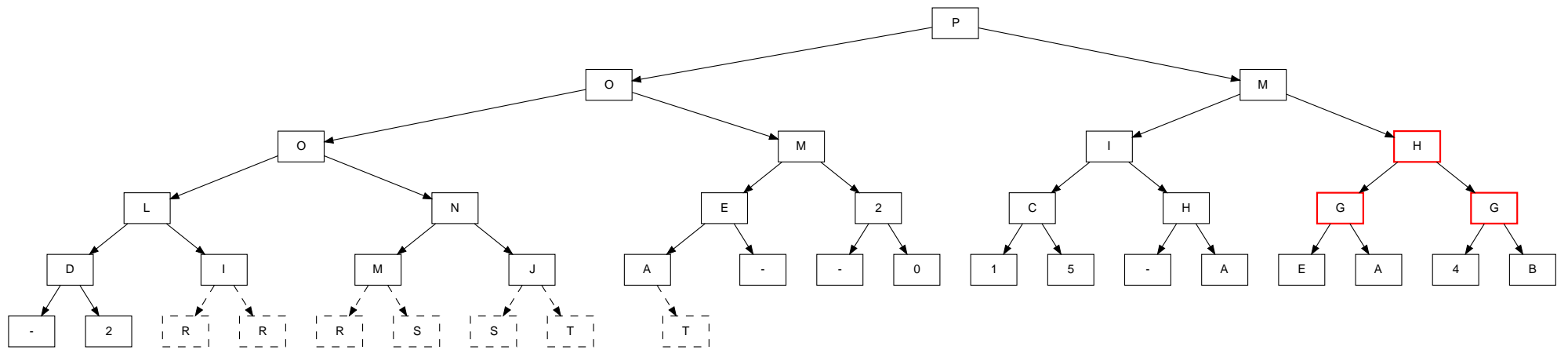
# Step 83: Heapify

[P, O, H, O, M, I, M, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, -, 2 || R, R, R, S, S, T, T]



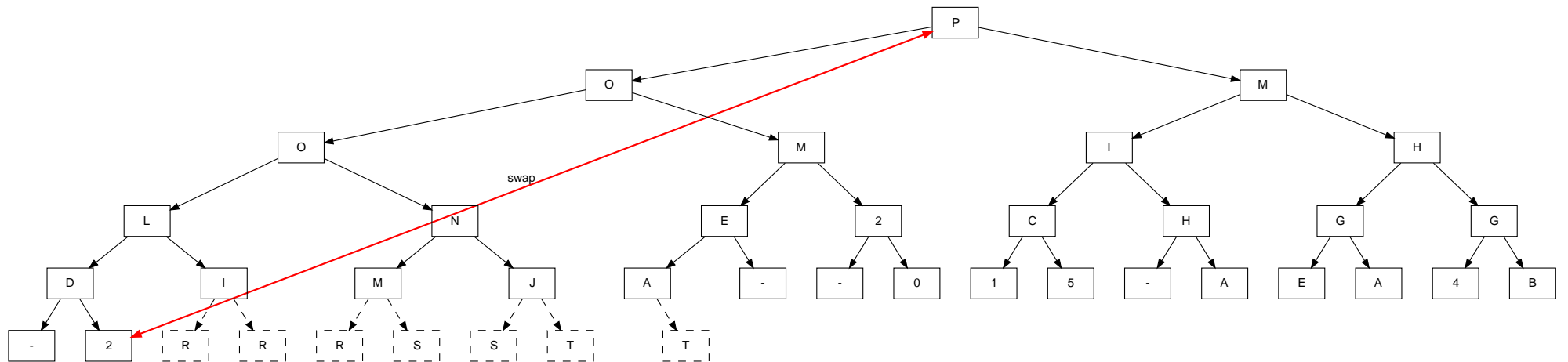
# Step 84: Heapify

[P, O, M, O, M, I, H, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, -, 2 || R, R, R, S, S, T, T]



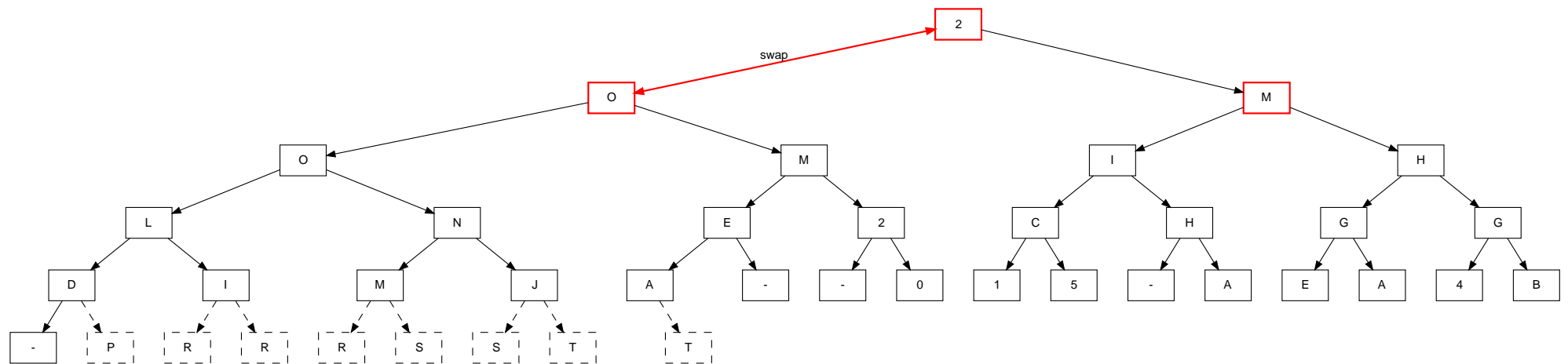
# Step 85: Sort-swap

[P, O, M, O, M, I, H, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, -, 2 || R, R, R, S, S, T, T]



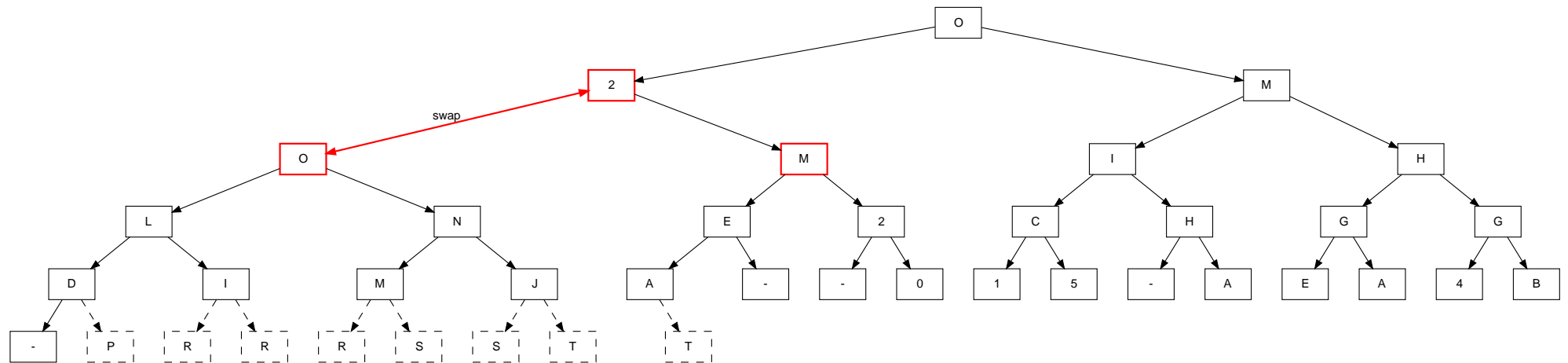
# Step 86: Heapify

[2, O, M, O, M, I, H, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, - || P, R, R, R, S, S, T, T]



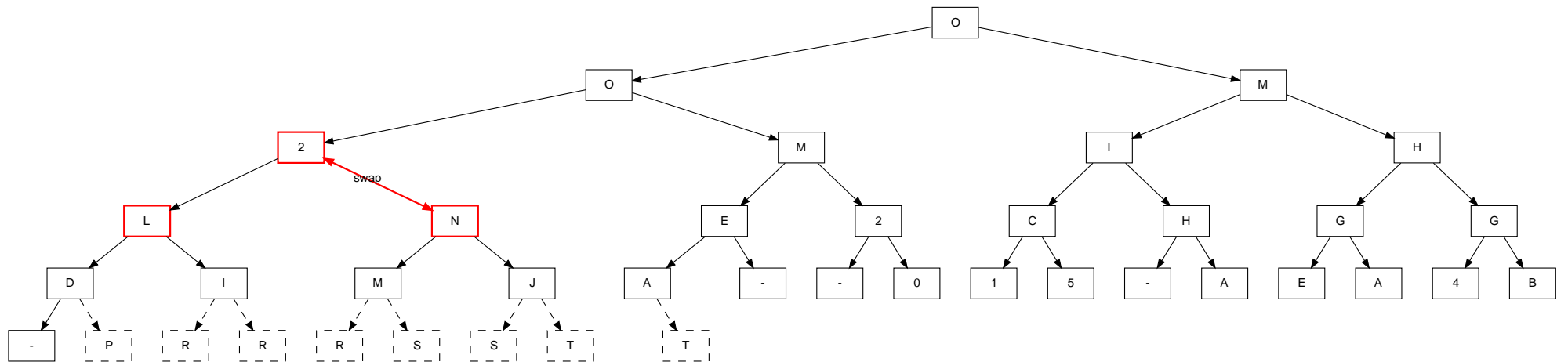
# Step 87: Heapify

[O, 2, M, O, M, I, H, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, - || P, R, R, R, S, S, T, T]



# Step 88: Heapify

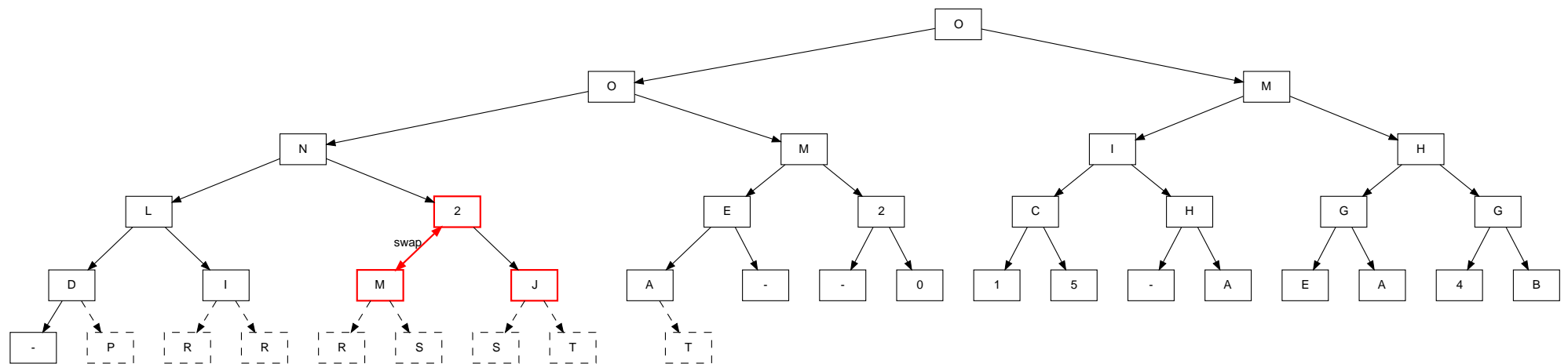
[O, O, M, 2, M, I, H, L, N, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, - || P, R, R, R, S, S, T, T]





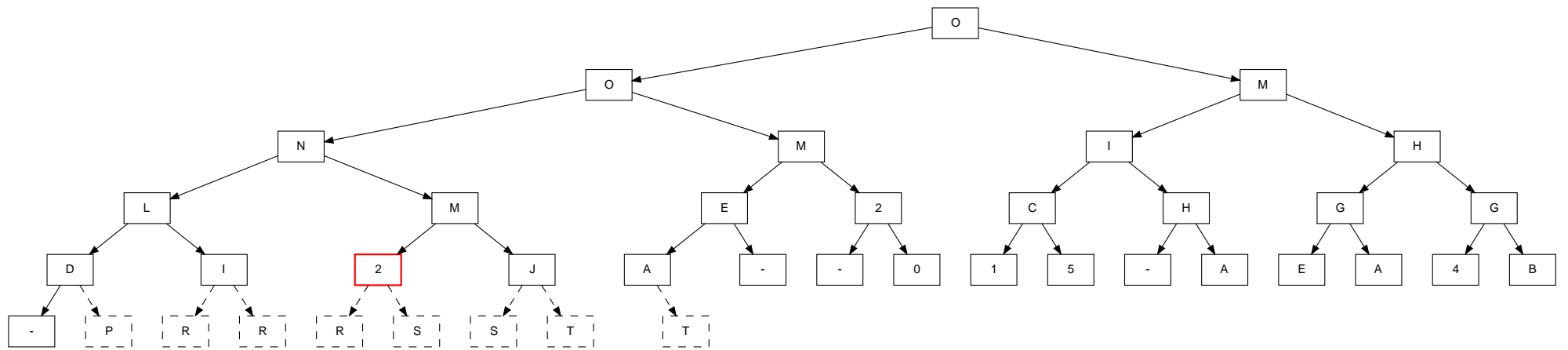
# Step 89: Heapify

[O, O, M, N, M, I, H, L, 2, E, 2, C, H, G, G, D, I, M, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, - || P, R, R, R, S, S, T, T]



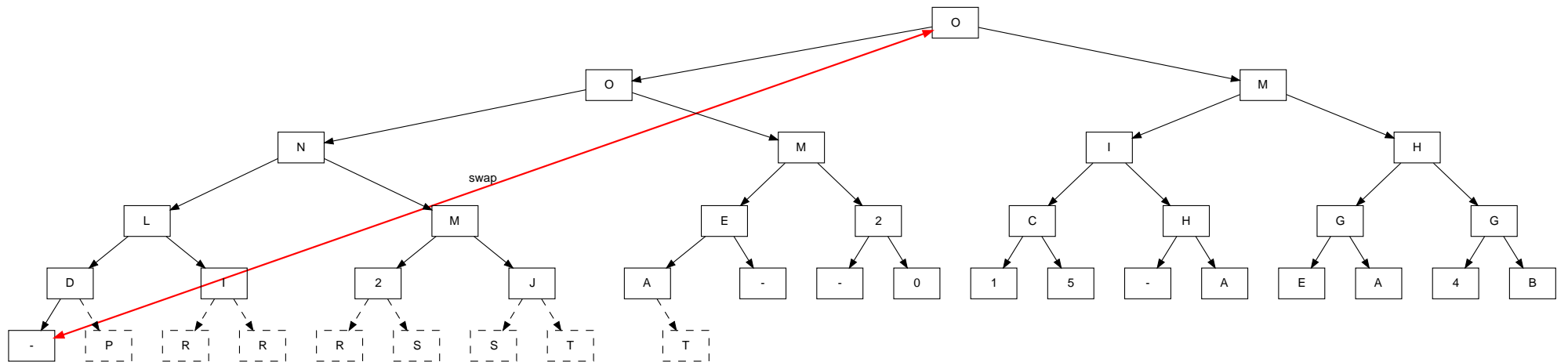
# Step 90: Heapify

[O, O, M, N, M, I, H, L, M, E, 2, C, H, G, G, D, I, 2, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, - || P, R, R, R, S, S, T, T]



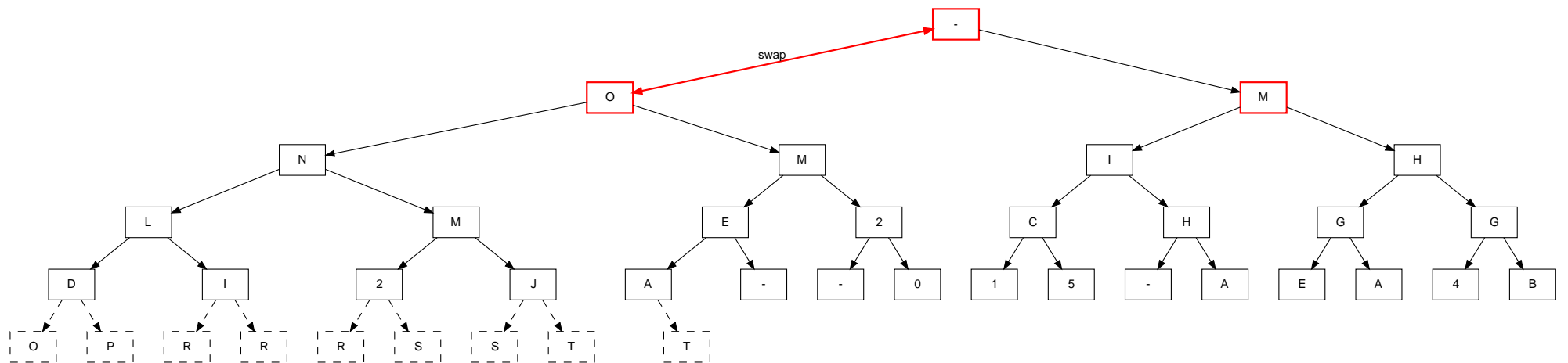
# Step 91: Sort-swap

[O, O, M, N, M, I, H, L, M, E, 2, C, H, G, G, D, I, 2, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B, - || P, R, R, R, S, S, T,  
T]



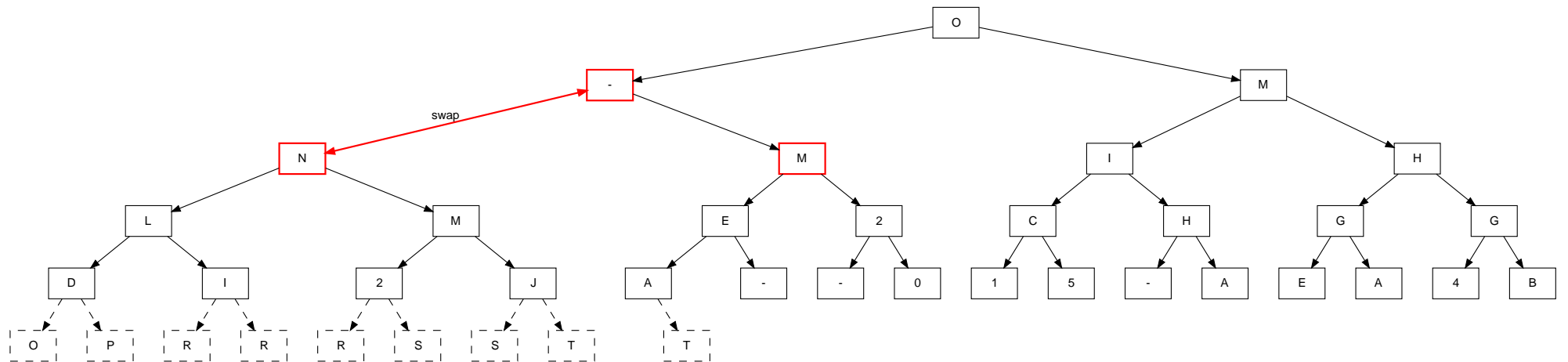
# Step 92: Heapify

[-, O, M, N, M, I, H, L, M, E, 2, C, H, G, G, D, I, 2, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B || O, P, R, R, R, S, S, T, T]



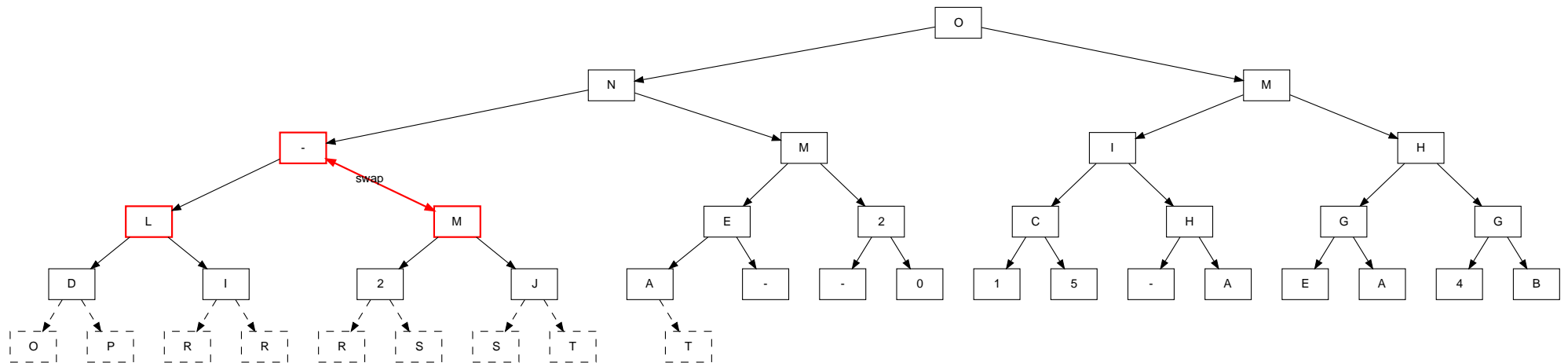
# Step 93: Heapify

[O, -, M, N, M, I, H, L, M, E, 2, C, H, G, G, D, I, 2, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B || O, P, R, R, R, S, S, T, T]



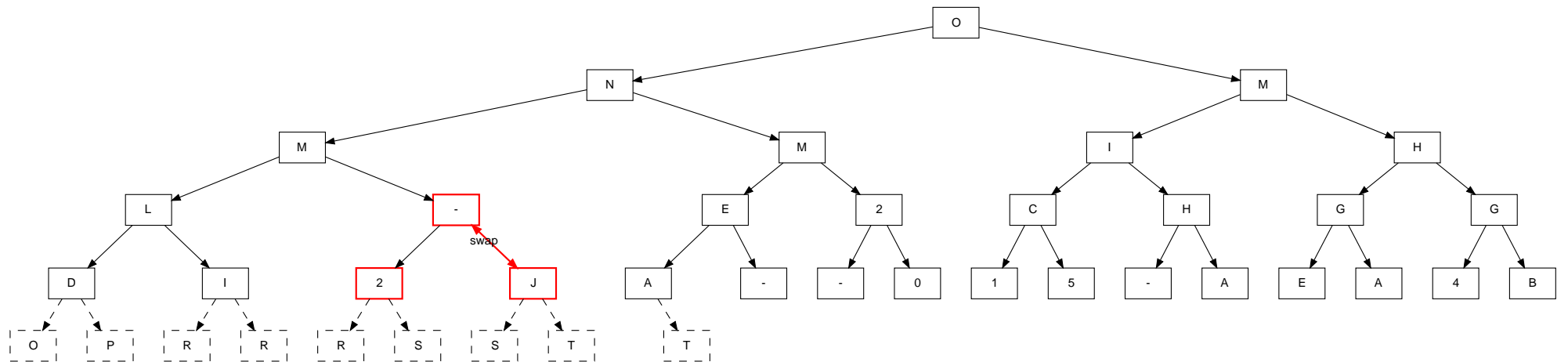
# Step 94: Heapify

[O, N, M, -, M, I, H, L, M, E, 2, C, H, G, G, D, I, 2, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B || O, P, R, R, R, S, S, T, T]



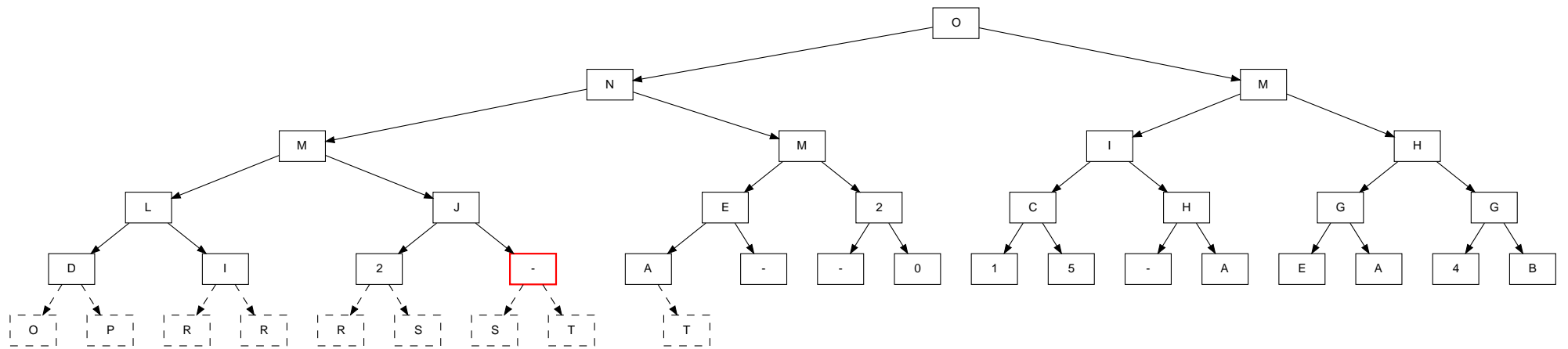
# Step 95: Heapify

[O, N, M, M, M, I, H, L, -, E, 2, C, H, G, G, D, I, 2, J, A, -, -, 0, 1, 5, -, A, E, A, 4, B || O, P, R, R, R, S, S, T, T]



# Step 96: Heapify

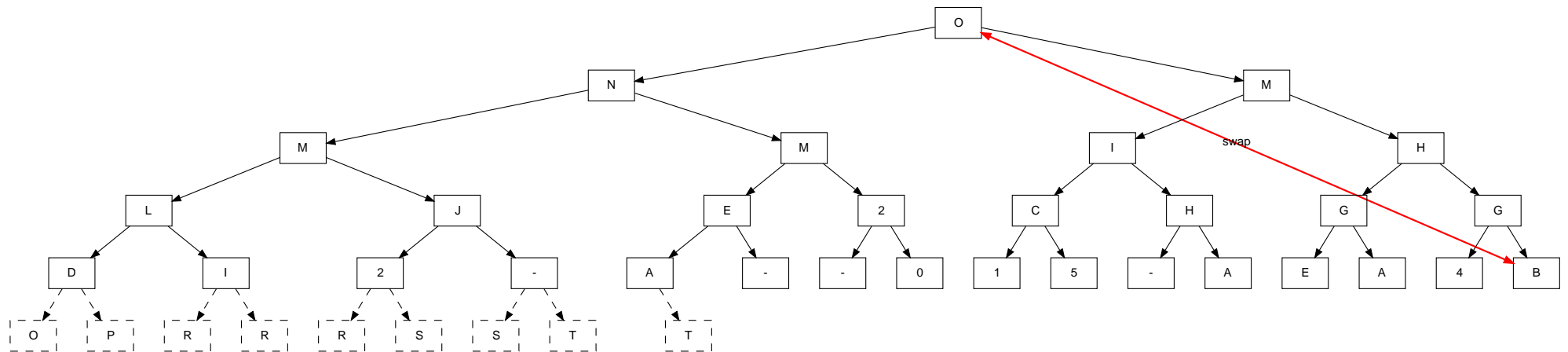
[O, N, M, M, M, I, H, L, J, E, 2, C, H, G, G, D, I, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4, B || O, P, R, R, R, S, S, T, T]





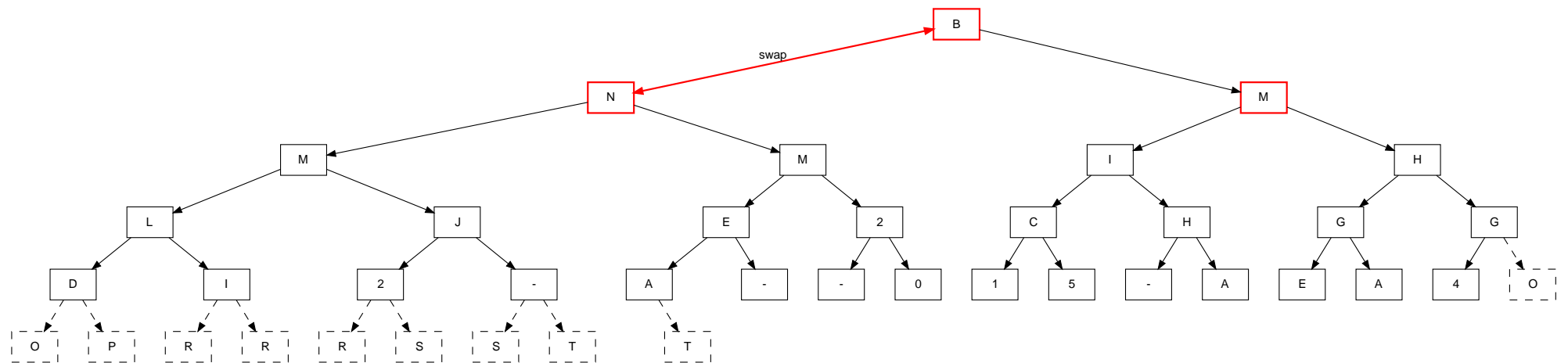
# Step 97: Sort-swap

[O, N, M, M, M, I, H, L, J, E, 2, C, H, G, G, D, I, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4, B || O, P, R, R, R, S, S, T,  
T]



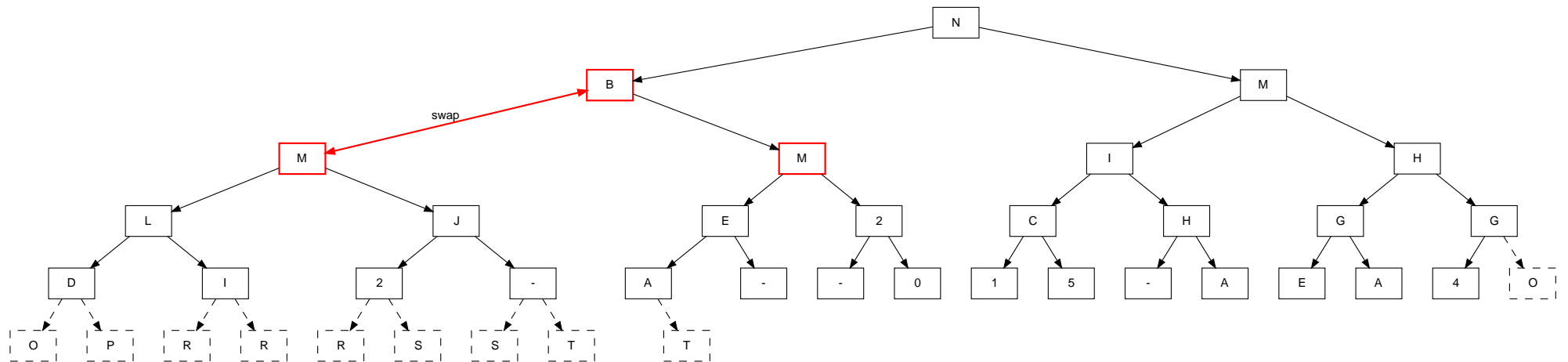
# Step 98: Heapify

[B, N, M, M, M, I, H, L, J, E, 2, C, H, G, G, D, I, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4 || O, O, P, R, R, R, S, S, T, T]



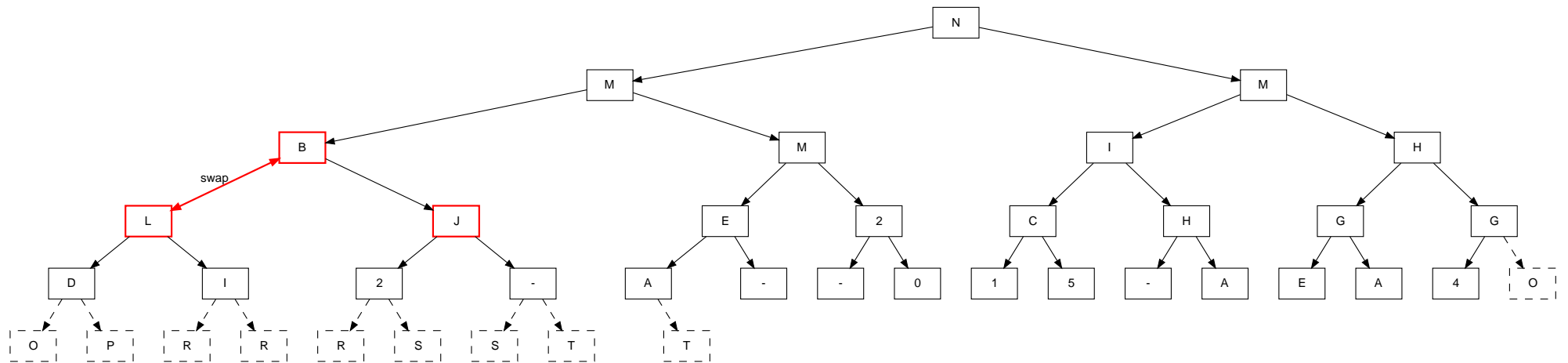
# Step 99: Heapify

[N, B, M, M, M, I, H, L, J, E, 2, C, H, G, G, D, I, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4 || O, O, P, R, R, R, S, S, T, T]



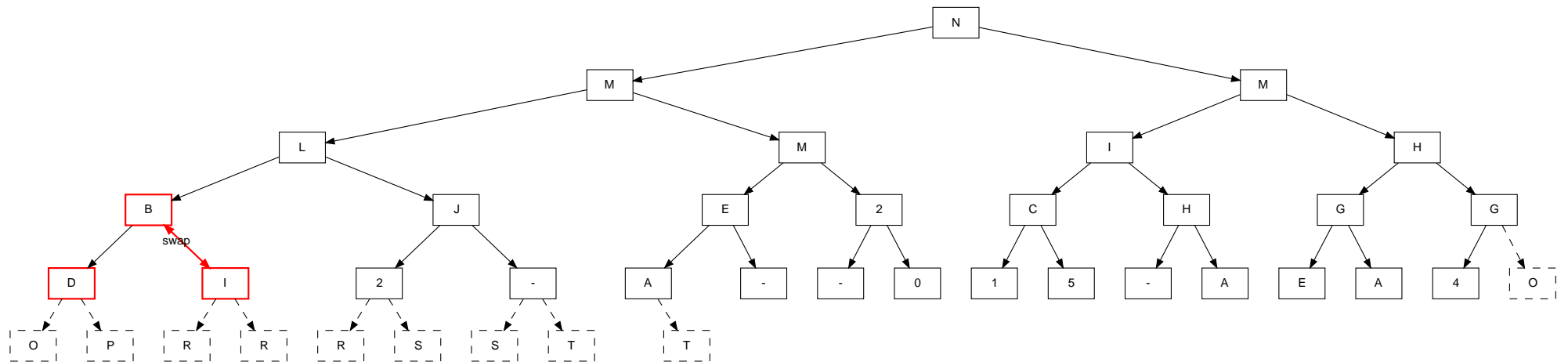
# Step 100: Heapify

[N, M, M, B, M, I, H, L, J, E, 2, C, H, G, G, D, I, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4 || O, O, P, R, R, R, S, S, T, T]



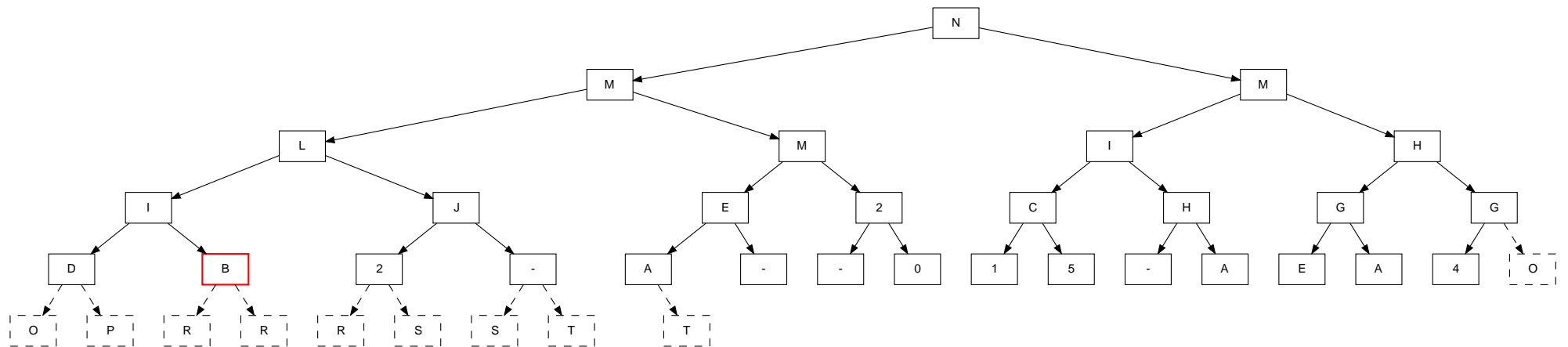
# Step 101: Heapify

[N, M, M, L, M, I, H, B, J, E, 2, C, H, G, G, D, I, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4 || O, O, P, R, R, R, S, S, T, T]



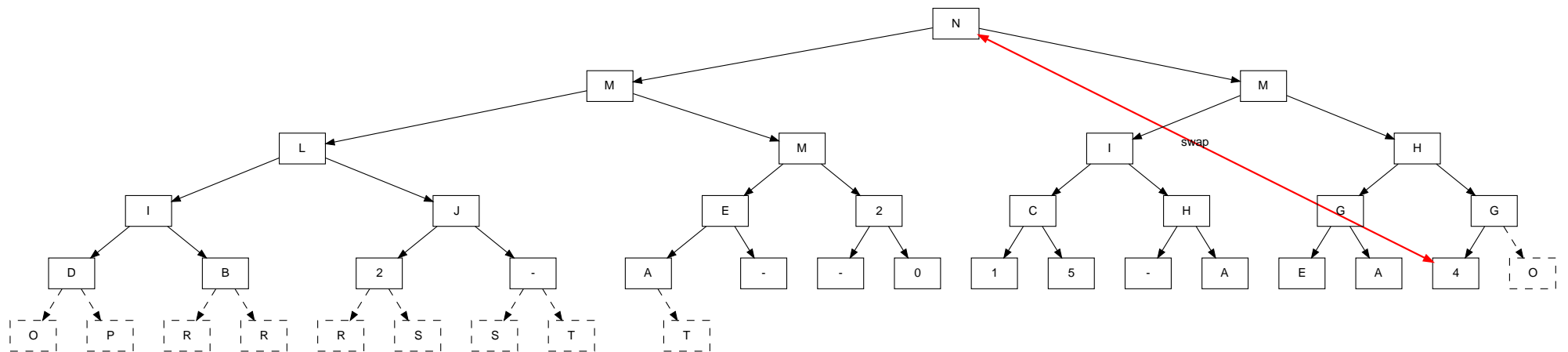
# Step 102: Heapify

[N, M, M, L, M, I, H, I, J, E, 2, C, H, G, G, D, B, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4 || O, O, P, R, R, R, S, S, T, T]



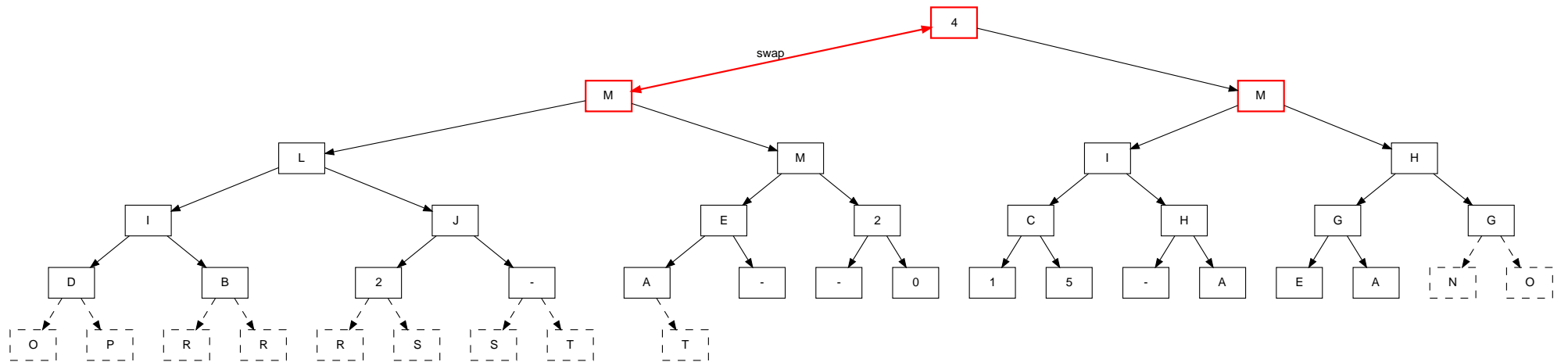
# Step 103: Sort-swap

[N, M, M, L, M, I, H, I, J, E, 2, C, H, G, G, D, B, 2, -, A, -, -, 0, 1, 5, -, A, E, A, 4 || O, O, P, R, R, R, S, S, T, T]



# Step 104: Heapify

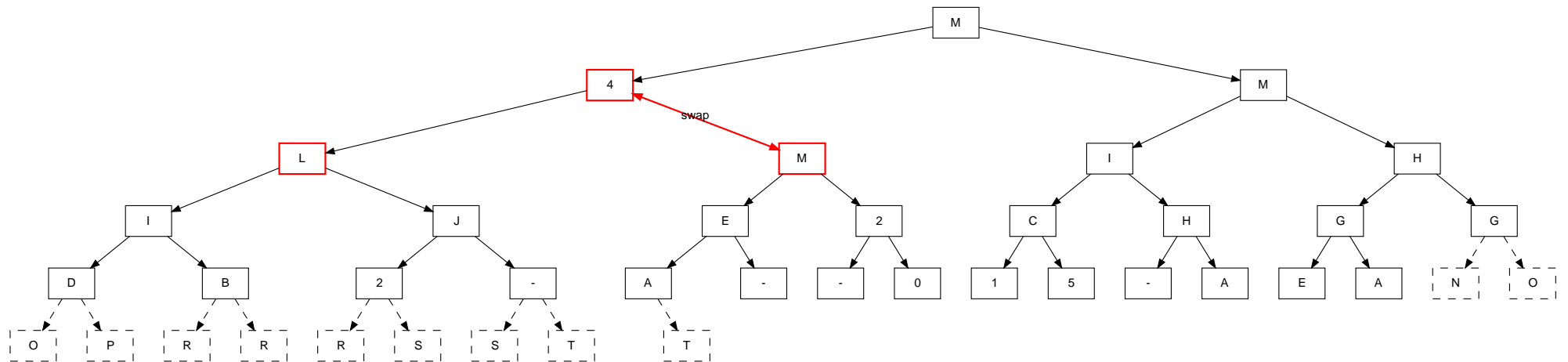
[4, M, M, L, M, I, H, I, J, E, 2, C, H, G, G, D, B, 2, -, A, -, -, 0, 1, 5, -, A, E, A || N, O, O, P, R, R, R, S, S, T, T]





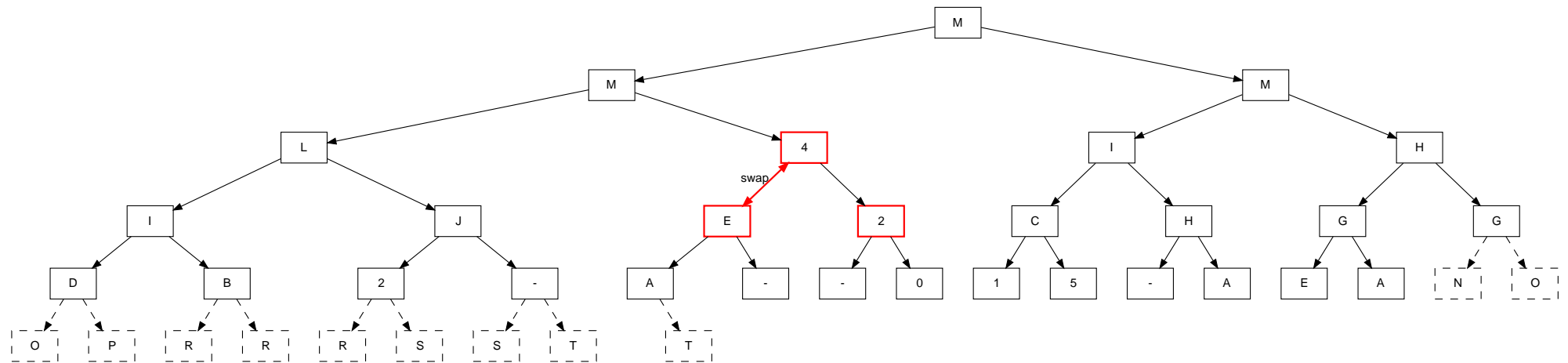
# Step 105: Heapify

[M, 4, M, L, M, I, H, I, J, E, 2, C, H, G, G, D, B, 2, -, A, -, -, 0, 1, 5, -, A, E, A || N, O, O, P, R, R, R, S, S, T, T]



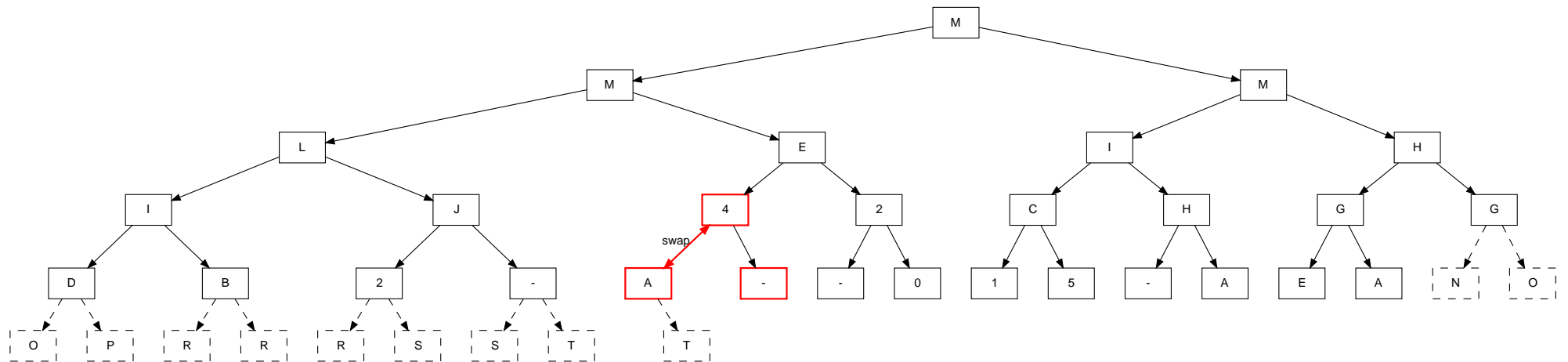
# Step 106: Heapify

[M, M, M, L, 4, I, H, I, J, E, 2, C, H, G, G, D, B, 2, -, A, -, -, 0, 1, 5, -, A, E, A || N, O, O, P, R, R, R, S, S, T, T]



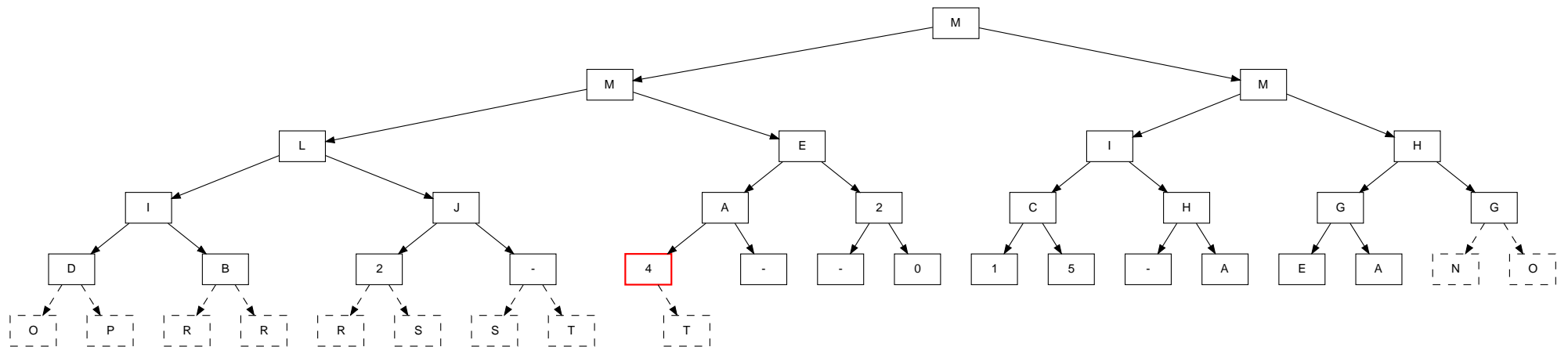
# Step 107: Heapify

[M, M, M, L, E, I, H, I, J, 4, 2, C, H, G, G, D, B, 2, -, A, -, -, 0, 1, 5, -, A, E, A || N, O, O, P, R, R, R, S, S, T, T]



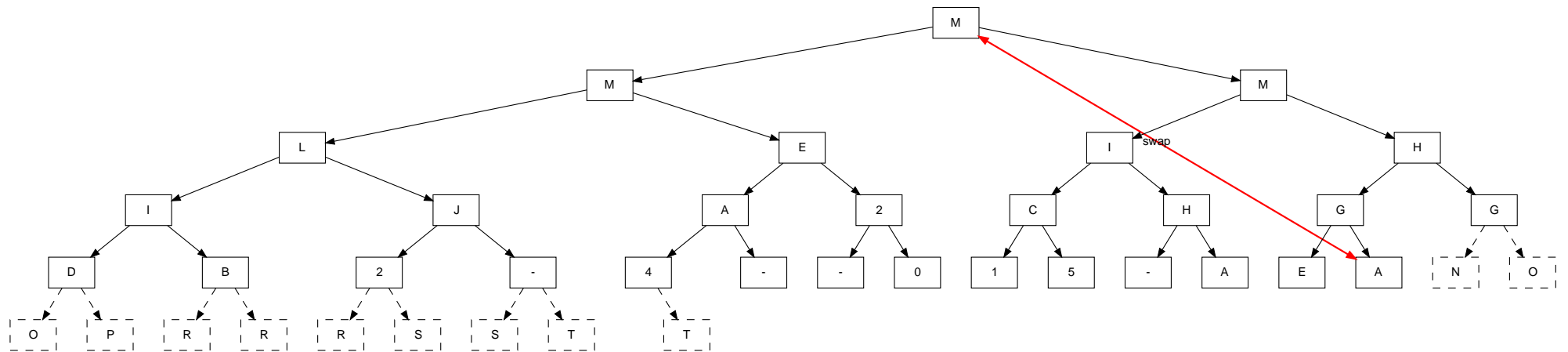
# Step 108: Heapify

[M, M, M, L, E, I, H, I, J, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E, A || N, O, O, P, R, R, R, S, S, T, T]



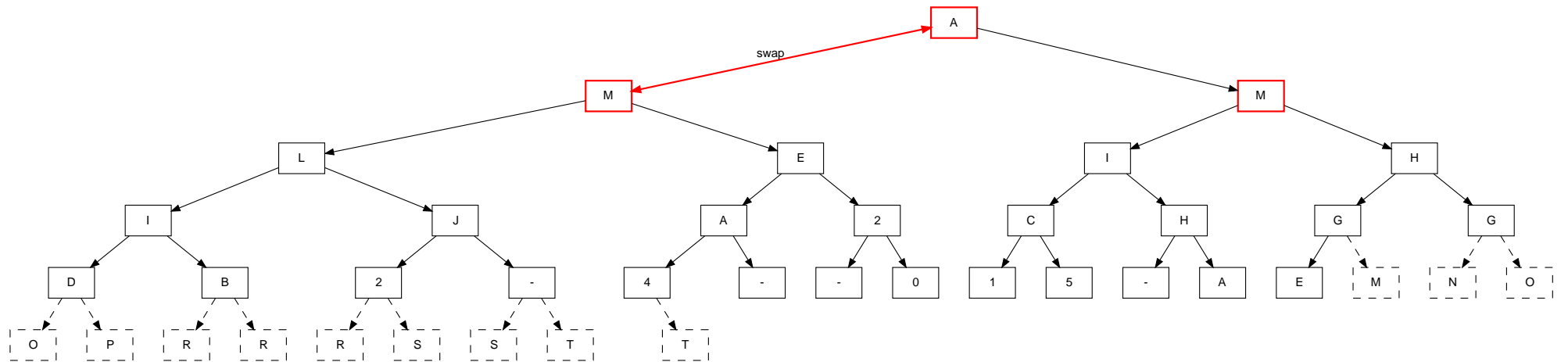
# Step 109: Sort-swap

[M, M, M, L, E, I, H, I, J, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E, A || N, O, O, P, R, R, R, S, S, T, T]



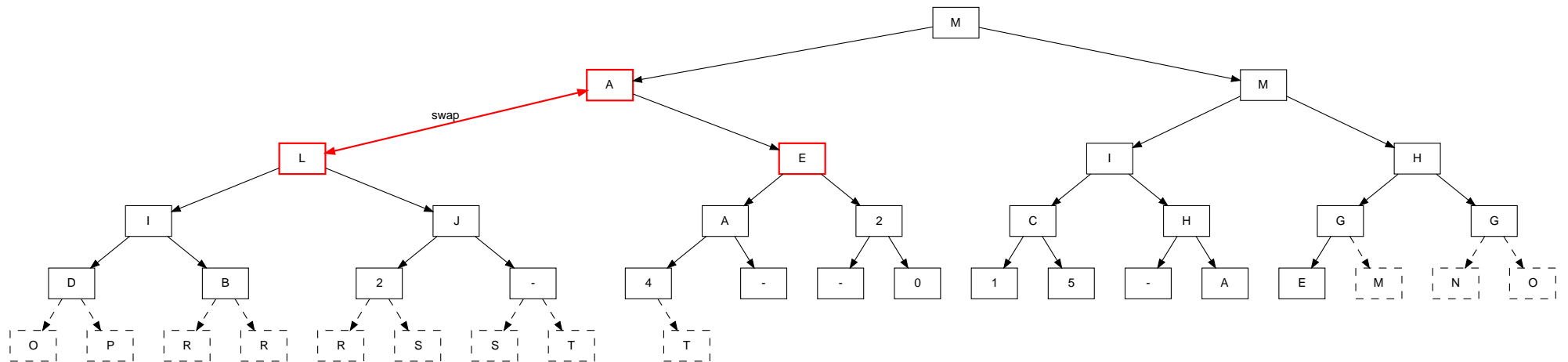
# Step 110: Heapify

[A, M, M, L, E, I, H, I, J, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E || M, N, O, O, P, R, R, R, S, S, T, T]



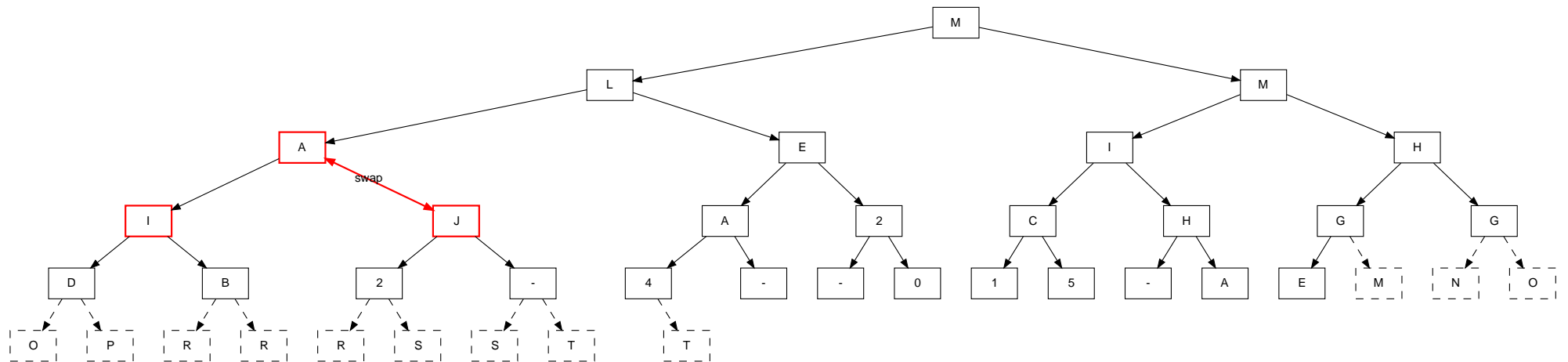
# Step 111: Heapify

[M, A, M, L, E, I, H, I, J, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E || M, N, O, O, P, R, R, R, S, S, T, T]



# Step 112: Heapify

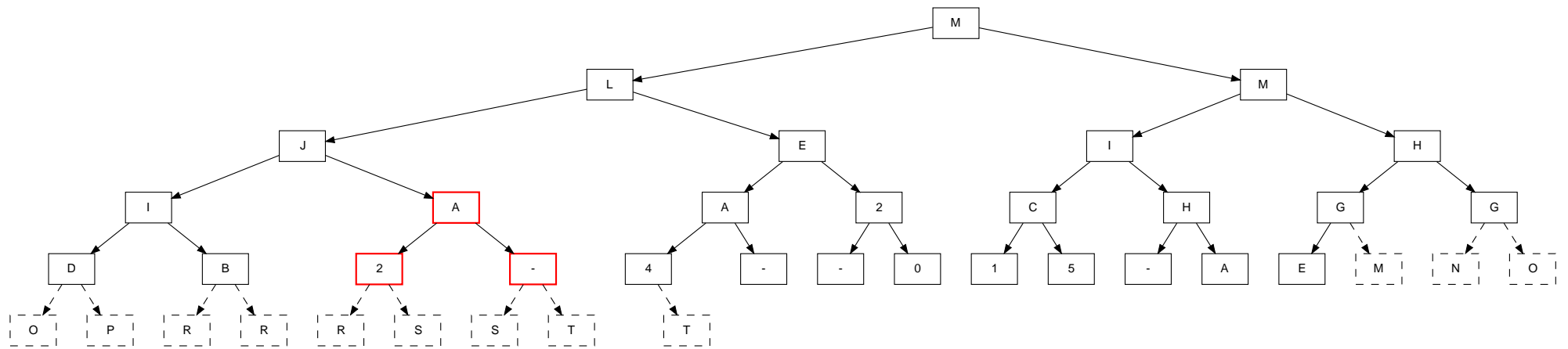
[M, L, M, A, E, I, H, I, J, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E || M, N, O, O, P, R, R, R, S, S, T, T]





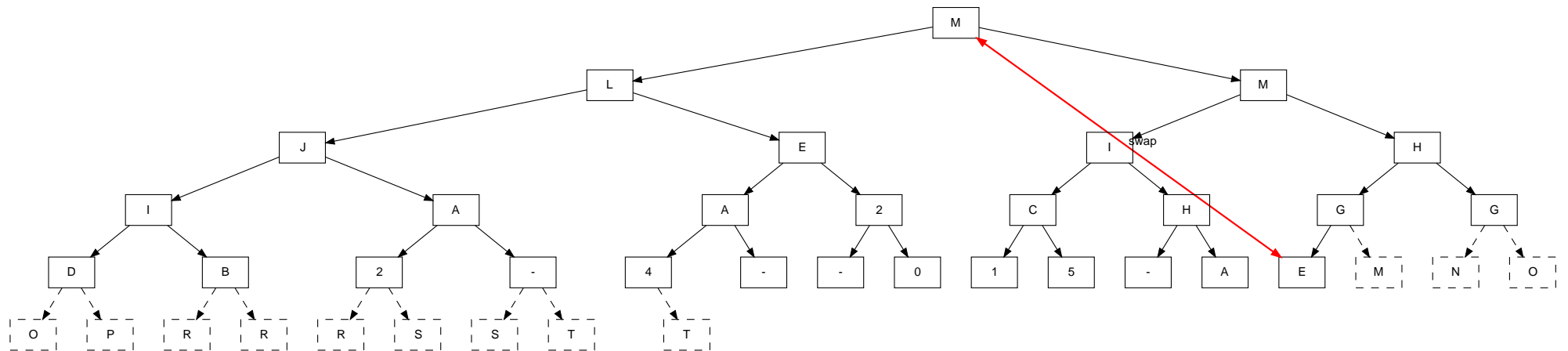
# Step 113: Heapify

[M, L, M, J, E, I, H, I, A, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E || M, N, O, O, P, R, R, R, S, S, T, T]



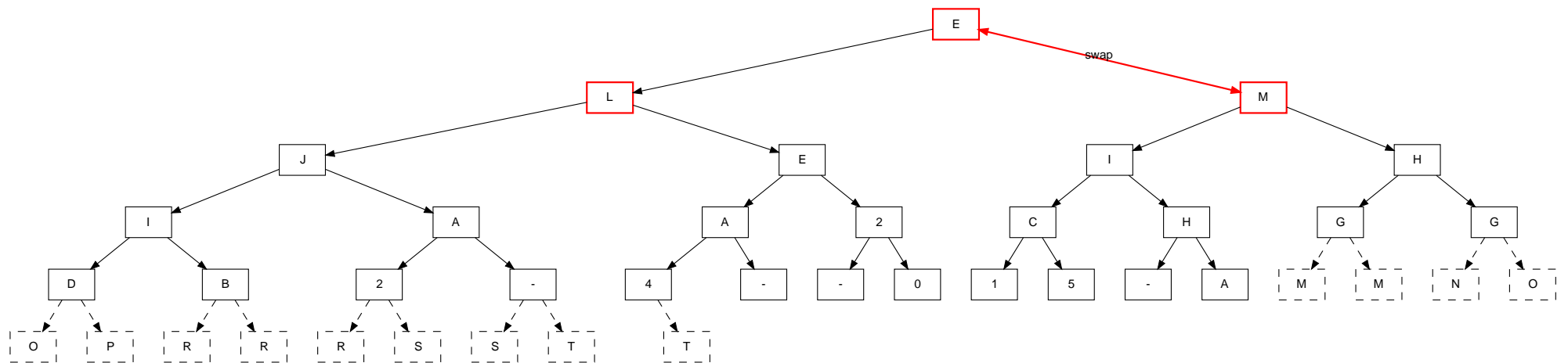
# Step 114: Sort-swap

[M, L, M, J, E, I, H, I, A, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A, E || M, N, O, O, P, R, R, R, S, S, T, T]



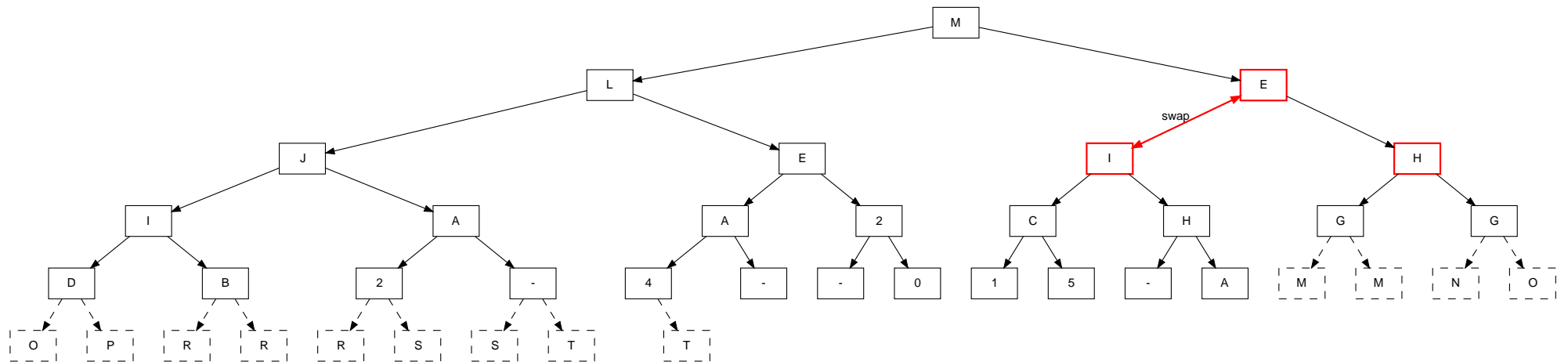
# Step 115: Heapify

[E, L, M, J, E, I, H, I, A, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A || M, M, N, O, O, P, R, R, R, S, S, T, T]



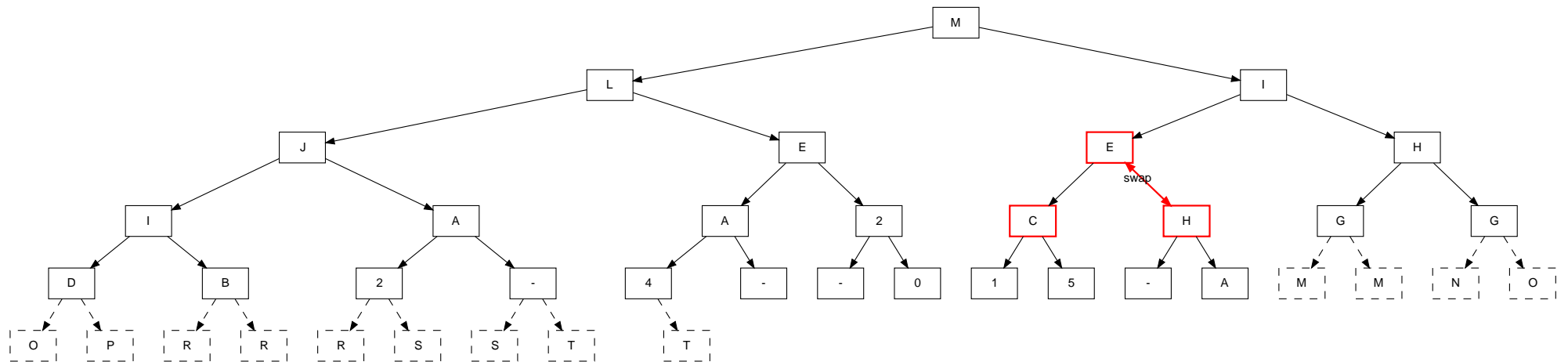
# Step 116: Heapify

[M, L, E, J, E, I, H, I, A, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A || M, M, N, O, O, P, R, R, R, S, S, T, T]



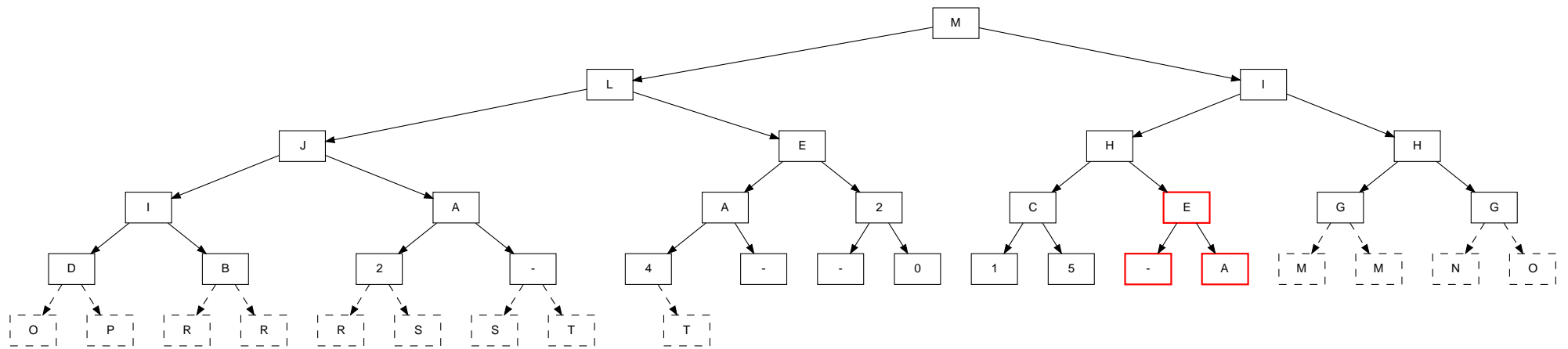
# Step 117: Heapify

[M, L, I, J, E, E, H, I, A, A, 2, C, H, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A || M, M, N, O, O, P, R, R, R, S, S, T, T]



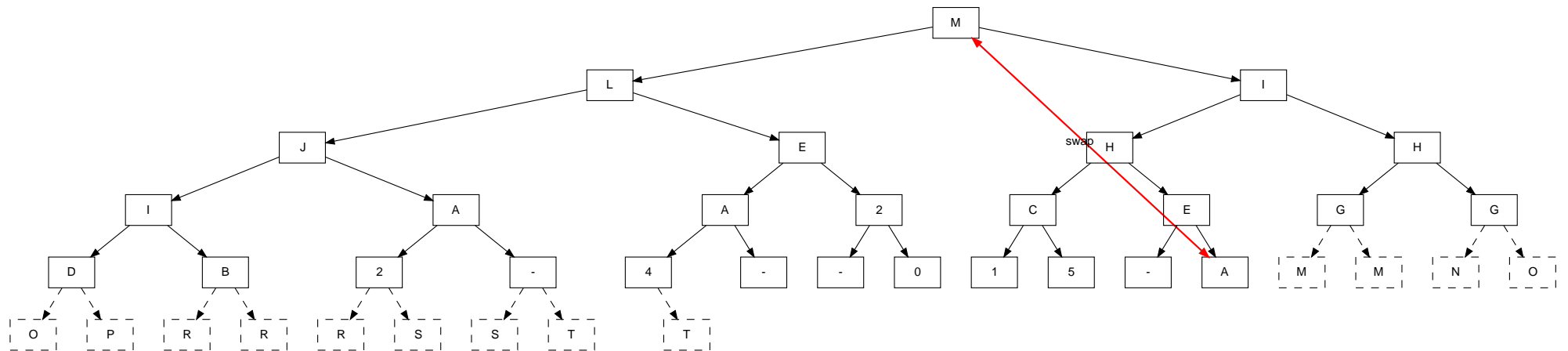
# Step 118: Heapify

[M, L, I, J, E, H, H, I, A, A, 2, C, E, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A || M, M, N, O, O, P, R, R, R, S, S, T, T]



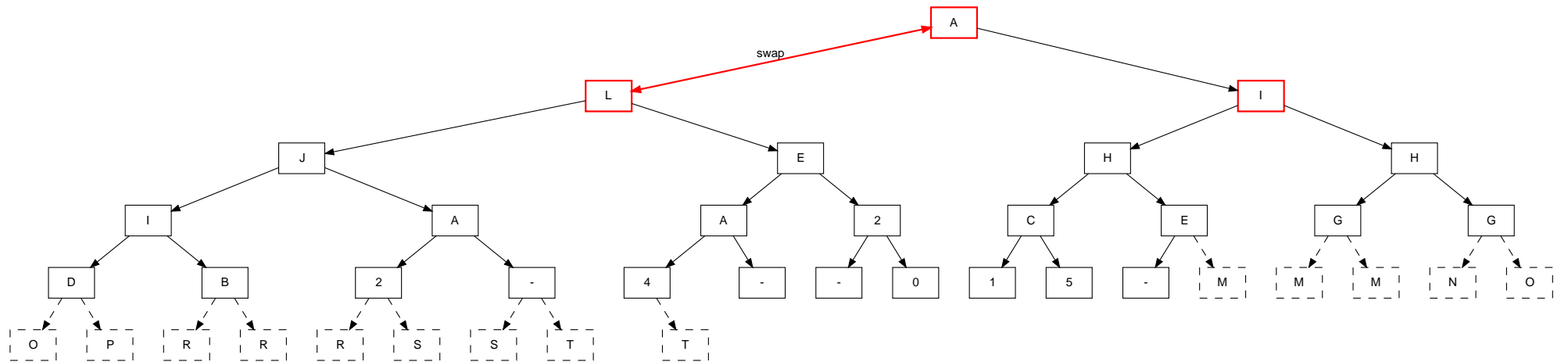
# Step 119: Sort-swap

[M, L, I, J, E, H, H, I, A, A, 2, C, E, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, -, A || M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 120: Heapify

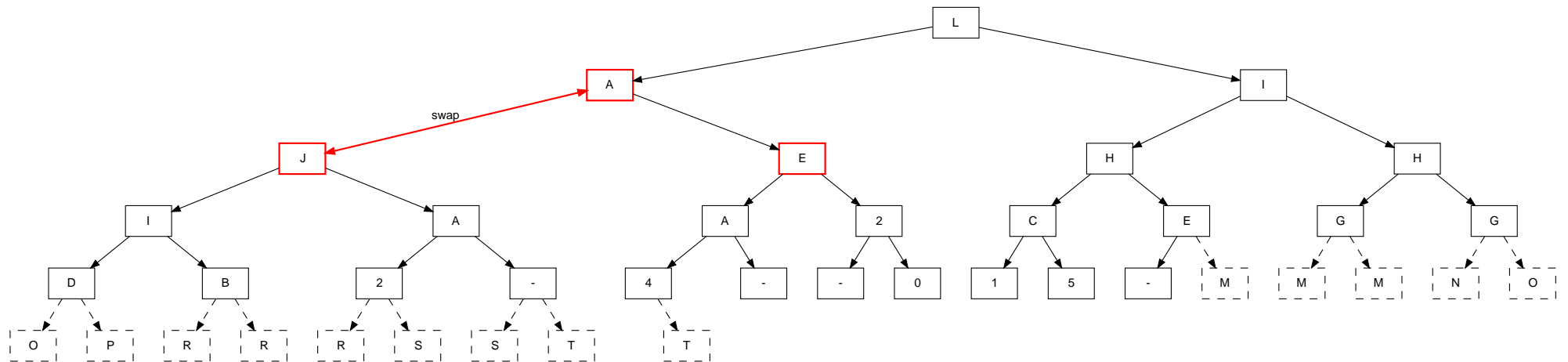
[A, L, I, J, E, H, H, I, A, A, 2, C, E, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, - || M, M, M, N, O, O, P, R, R, R, S, S, T, T]





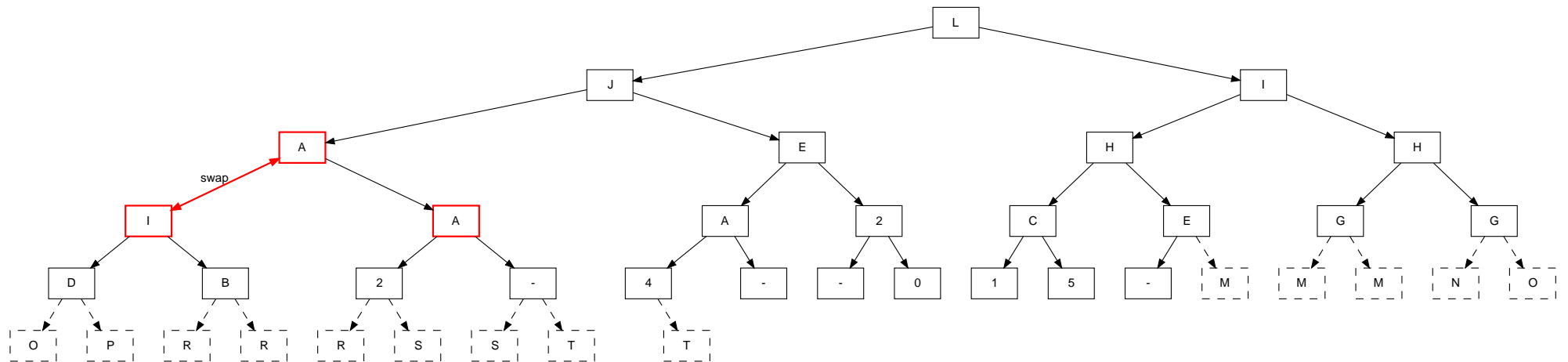
# Step 121: Heapify

[L, A, I, J, E, H, H, I, A, A, 2, C, E, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, - || M, M, M, N, O, O, P, R, R, R, S, S, T, T]



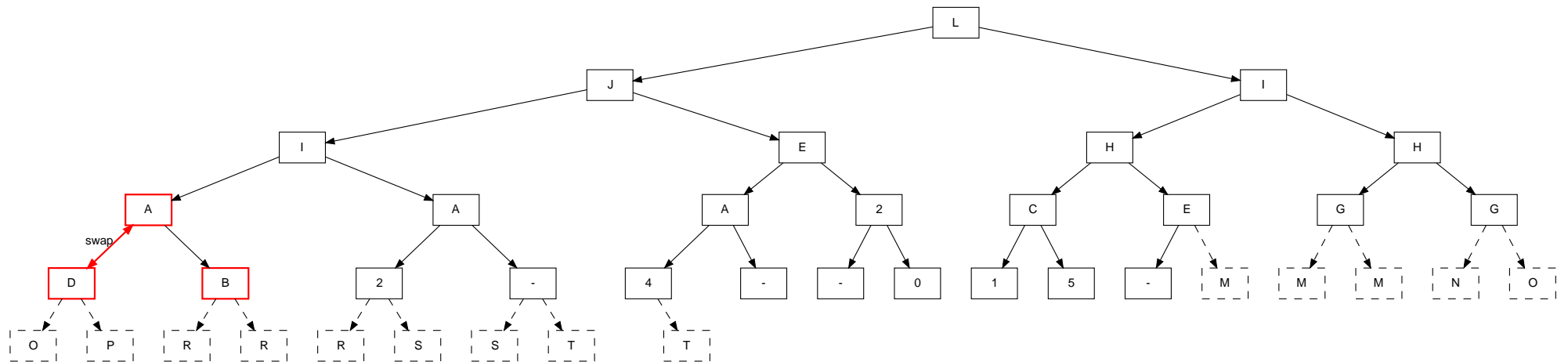
# Step 122: Heapify

[L, J, I, A, E, H, H, I, A, A, 2, C, E, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, - || M, M, M, N, O, O, P, R, R, R, S, S, T, T]



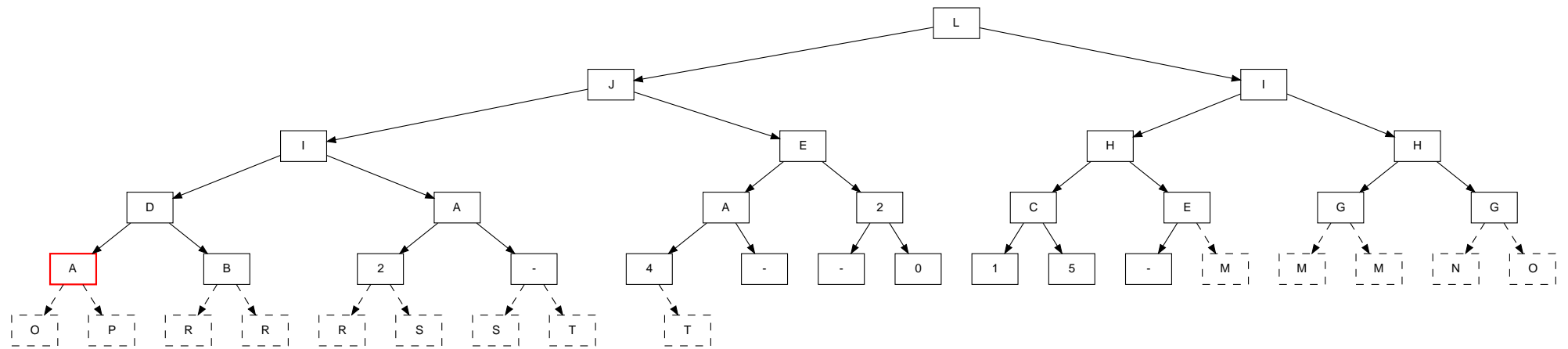
# Step 123: Heapify

[L, J, I, I, E, H, H, A, A, A, 2, C, E, G, G, D, B, 2, -, 4, -, -, 0, 1, 5, - || M, M, M, N, O, O, P, R, R, R, S, S, T, T]



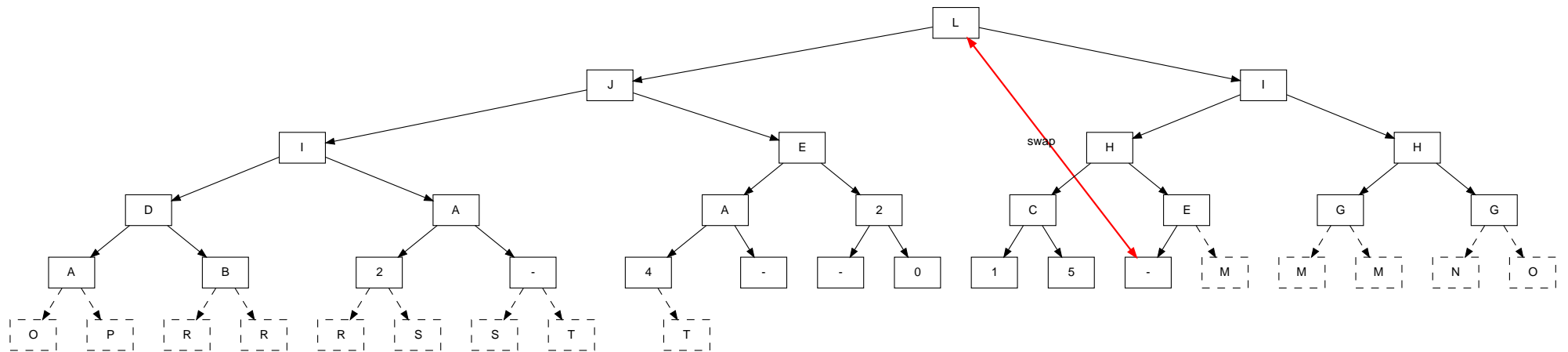
# Step 124: Heapify

[L, J, I, I, E, H, H, D, A, A, 2, C, E, G, G, A, B, 2, -, 4, -, -, 0, 1, 5, - || M, M, M, N, O, O, P, R, R, R, S, S, T, T]



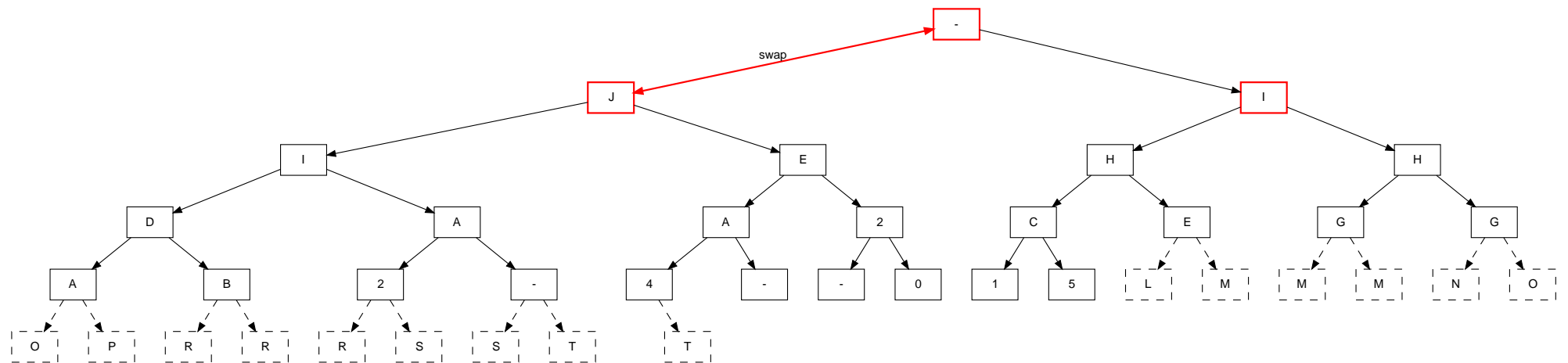
# Step 125: Sort-swap

[L, J, I, I, E, H, H, D, A, A, 2, C, E, G, G, A, B, 2, -, 4, -, -, 0, 1, 5, - || M, M, M, N, O, O, P, R, R, R, S, S, T, T]



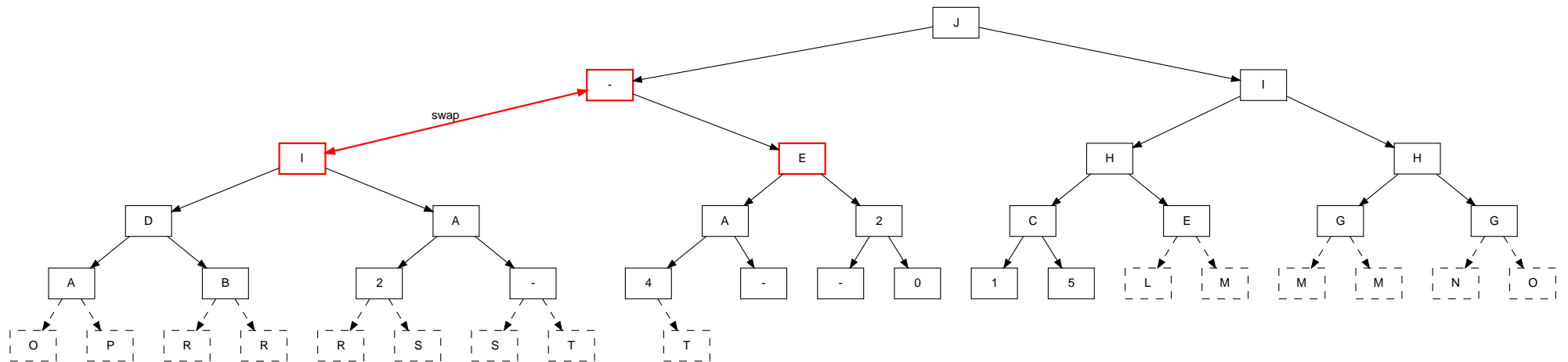
# Step 126: Heapify

[-, J, I, I, E, H, H, D, A, A, 2, C, E, G, G, A, B, 2, -, 4, -, -, 0, 1, 5 || L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



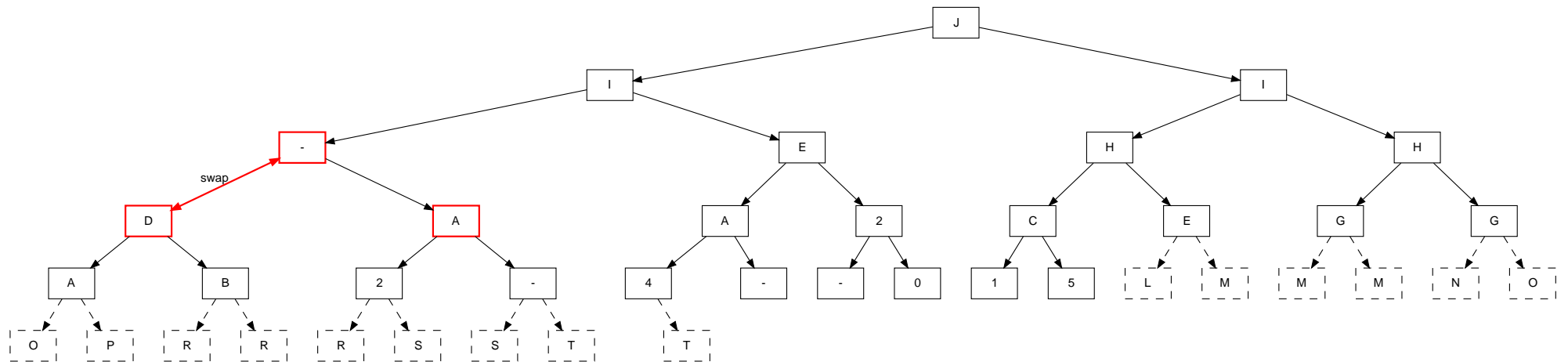
# Step 127: Heapify

[J, -, I, I, E, H, H, D, A, A, 2, C, E, G, G, A, B, 2, -, 4, -, -, 0, 1, 5 || L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 128: Heapify

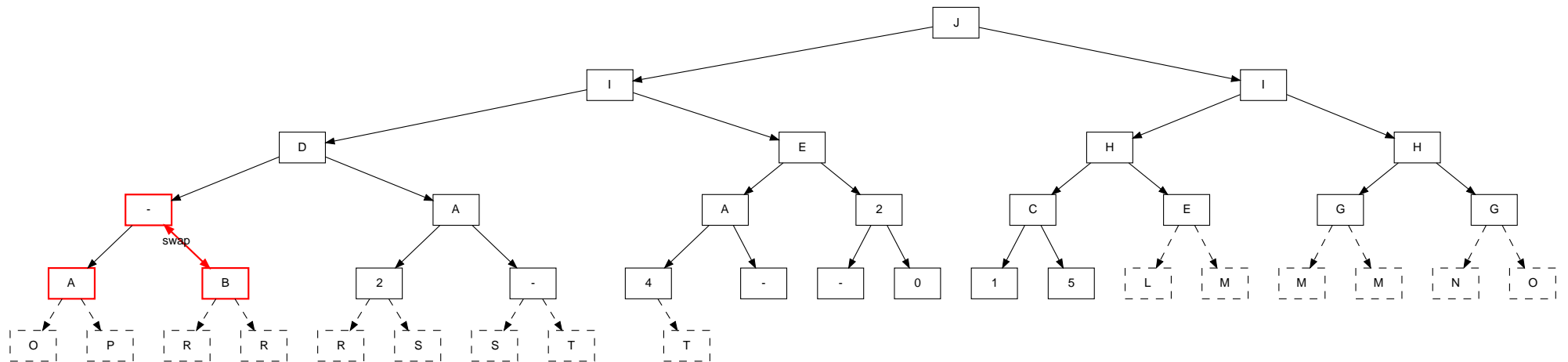
[J, I, I, -, E, H, H, D, A, A, 2, C, E, G, G, A, B, 2, -, 4, -, -, 0, 1, 5 || L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





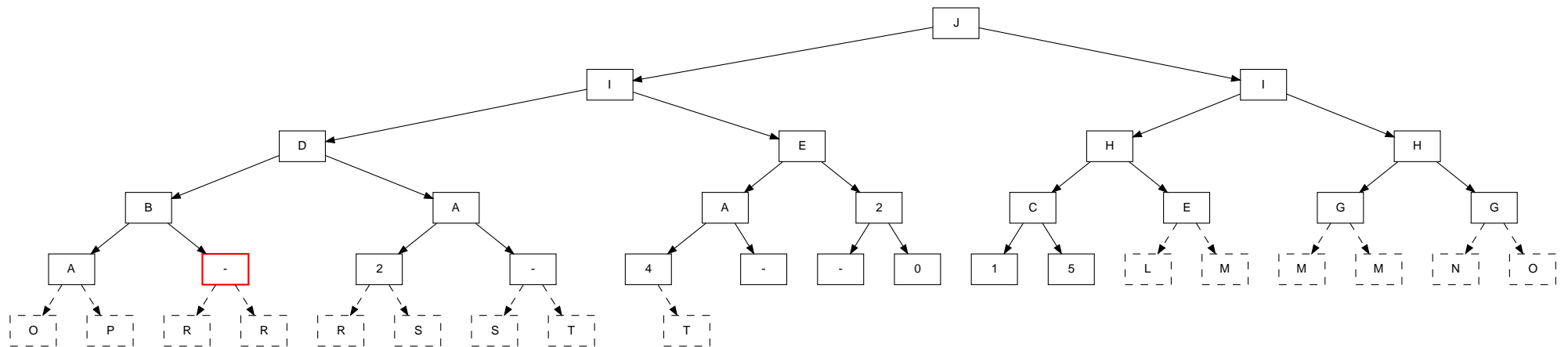
# Step 129: Heapify

[J, I, I, D, E, H, H, -, A, A, 2, C, E, G, G, A, B, 2, -, 4, -, -, 0, 1, 5 || L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



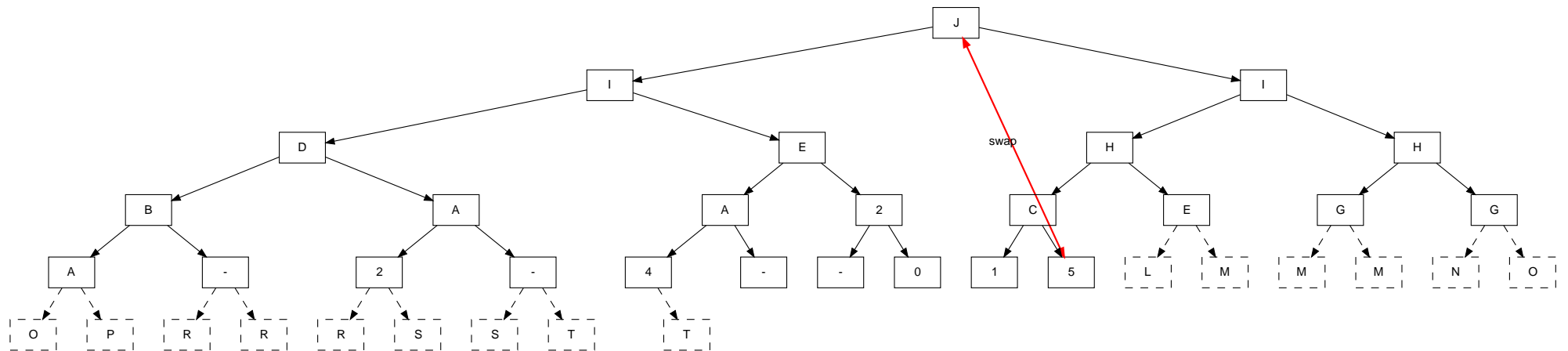
# Step 130: Heapify

[J, I, I, D, E, H, H, B, A, A, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1, 5 || L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



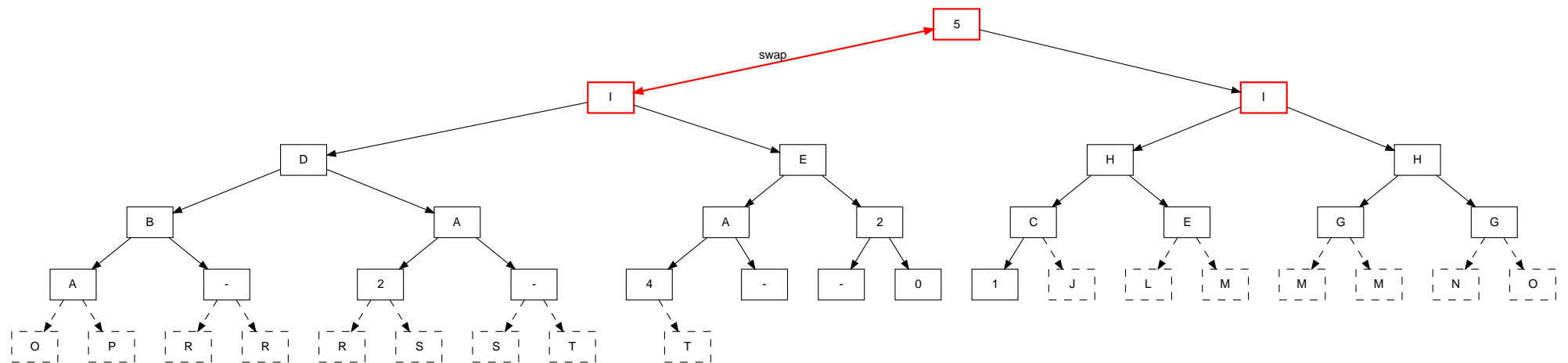
# Step 131: Sort-swap

[J, I, I, D, E, H, H, B, A, A, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1, 5 || L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



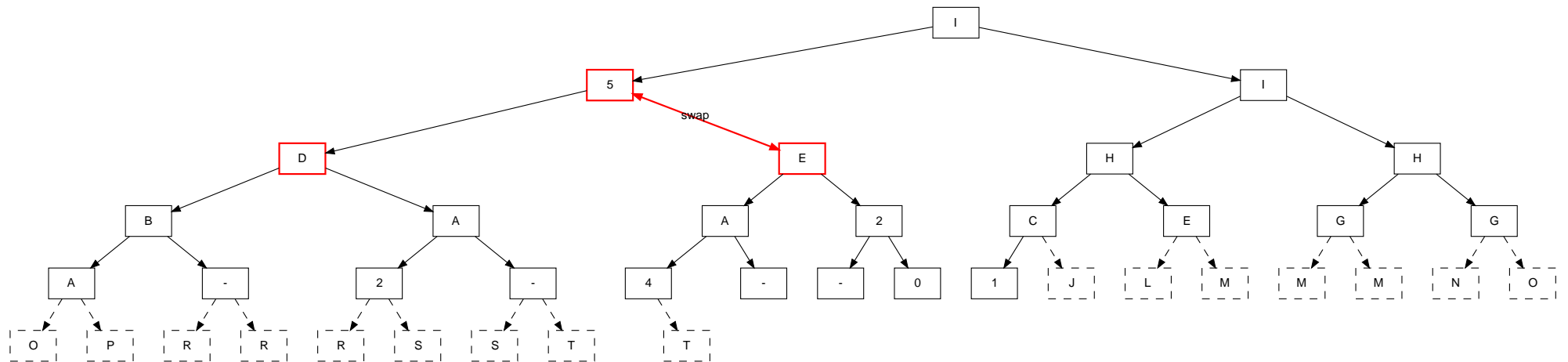
# Step 132: Heapify

[5, I, I, D, E, H, H, B, A, A, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1 || J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



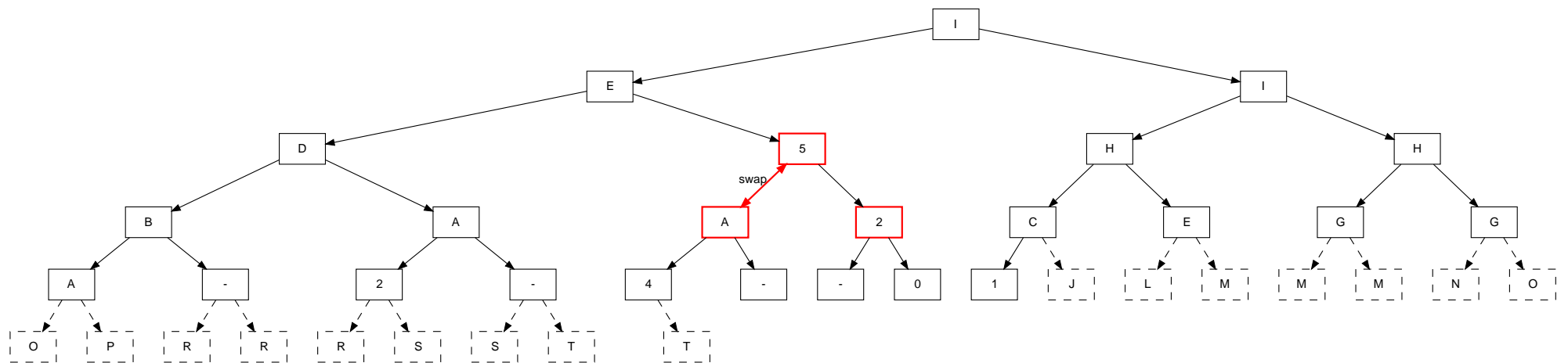
# Step 133: Heapify

[I, 5, I, D, E, H, H, B, A, A, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1 || J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



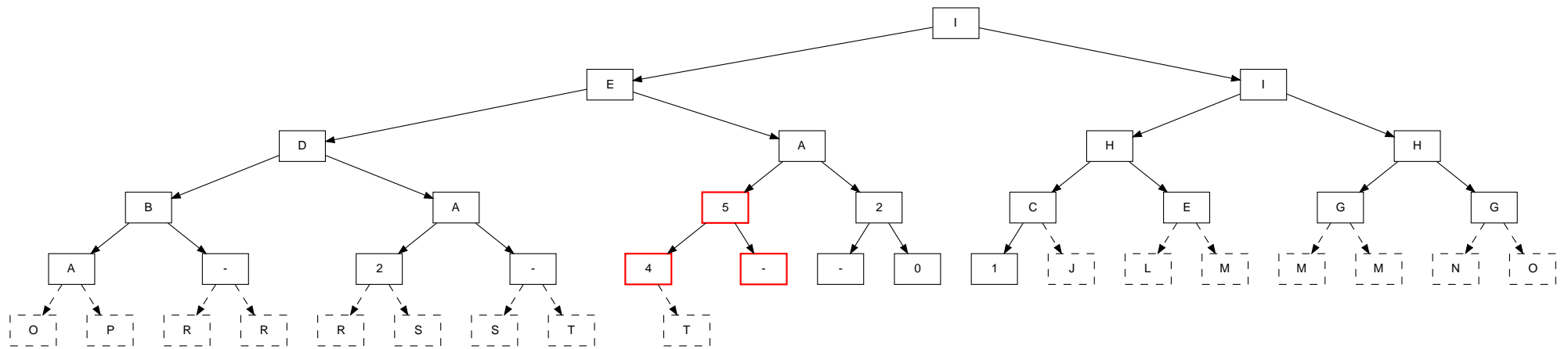
# Step 134: Heapify

[I, E, I, D, 5, H, H, B, A, A, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1 || J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



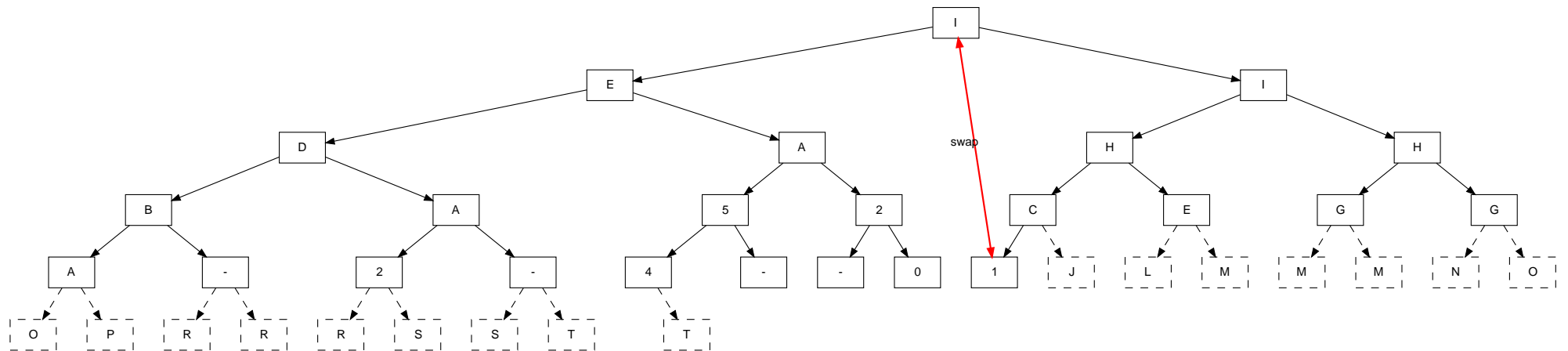
# Step 135: Heapify

[I, E, I, D, A, H, H, B, A, 5, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1 || J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 136: Sort-swap

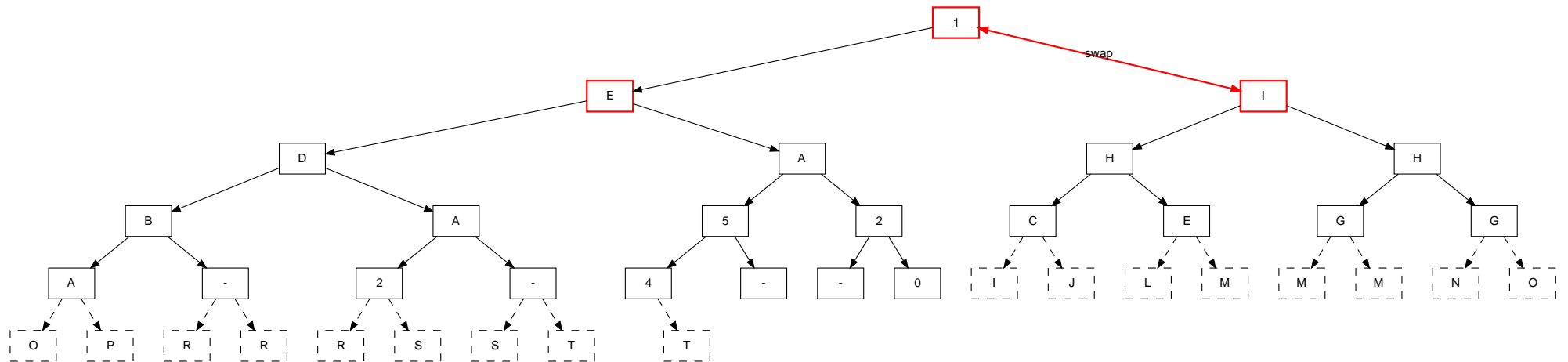
[I, E, I, D, A, H, H, B, A, 5, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0, 1 || J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





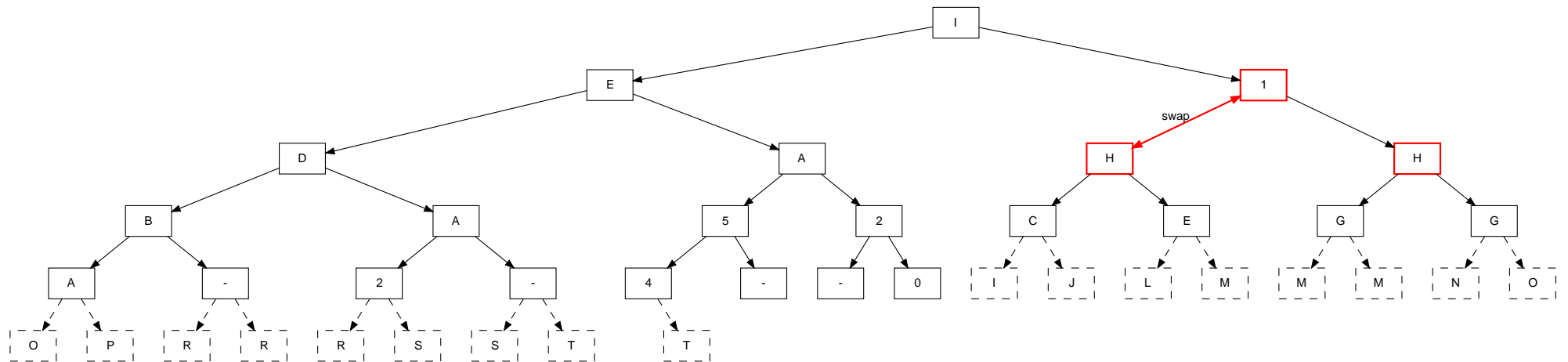
# Step 137: Heapify

[1, E, I, D, A, H, H, B, A, 5, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0 || I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



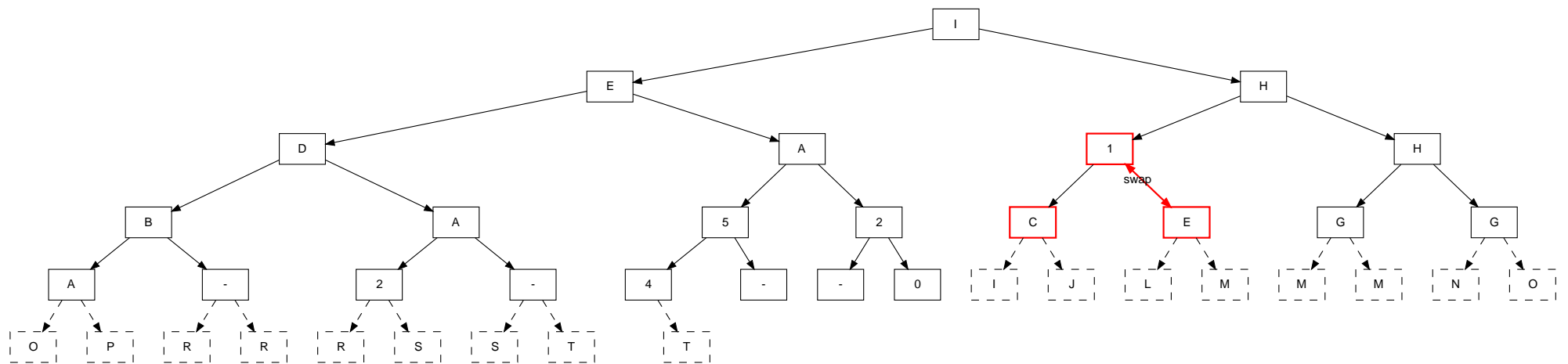
# Step 138: Heapify

[I, E, 1, D, A, H, H, B, A, 5, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0 || I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



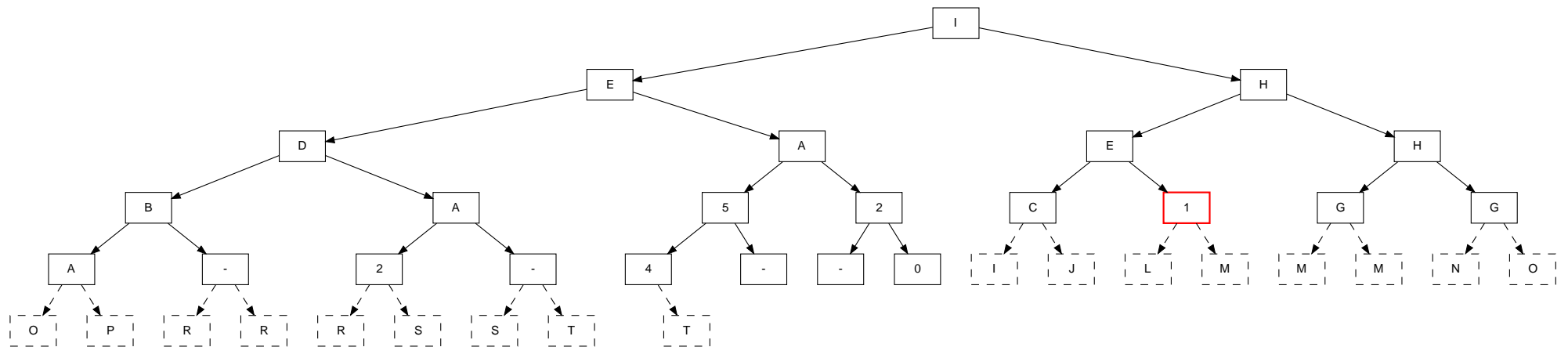
# Step 139: Heapify

[I, E, H, D, A, 1, H, B, A, 5, 2, C, E, G, G, A, -, 2, -, 4, -, -, 0 || I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



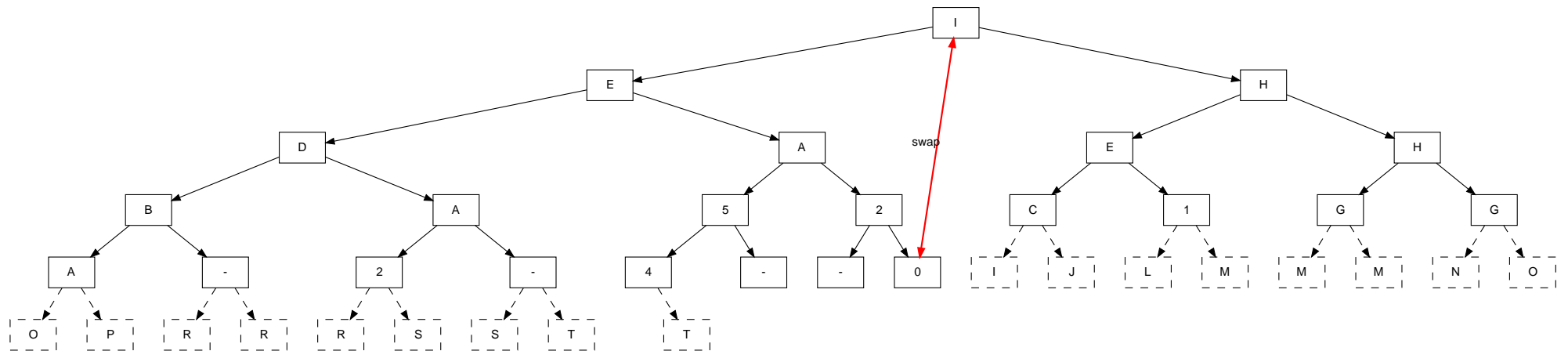
# Step 140: Heapify

[I, E, H, D, A, E, H, B, A, 5, 2, C, 1, G, G, A, -, 2, -, 4, -, -, 0 || I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



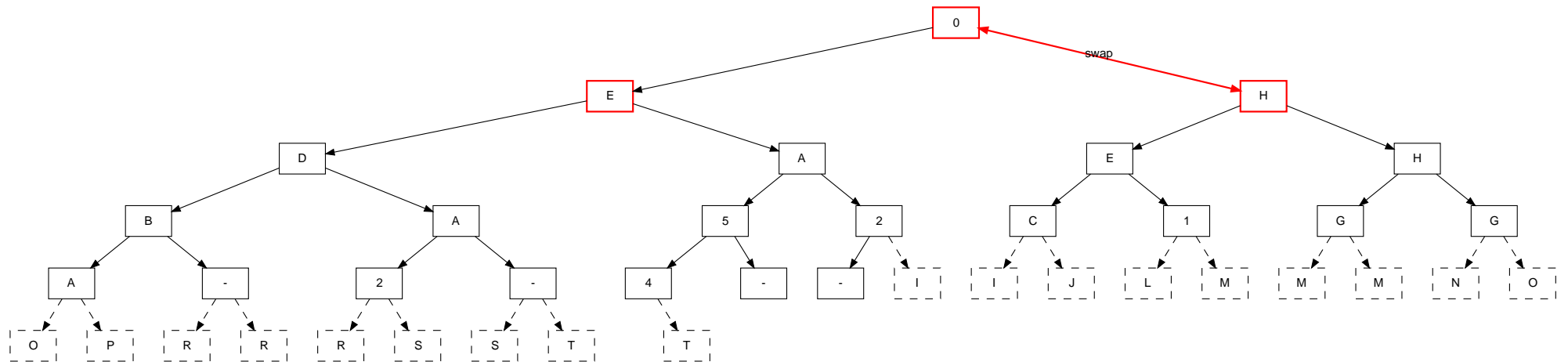
# Step 141: Sort-swap

[I, E, H, D, A, E, H, B, A, 5, 2, C, 1, G, G, A, -, 2, -, 4, -, -, 0 || I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



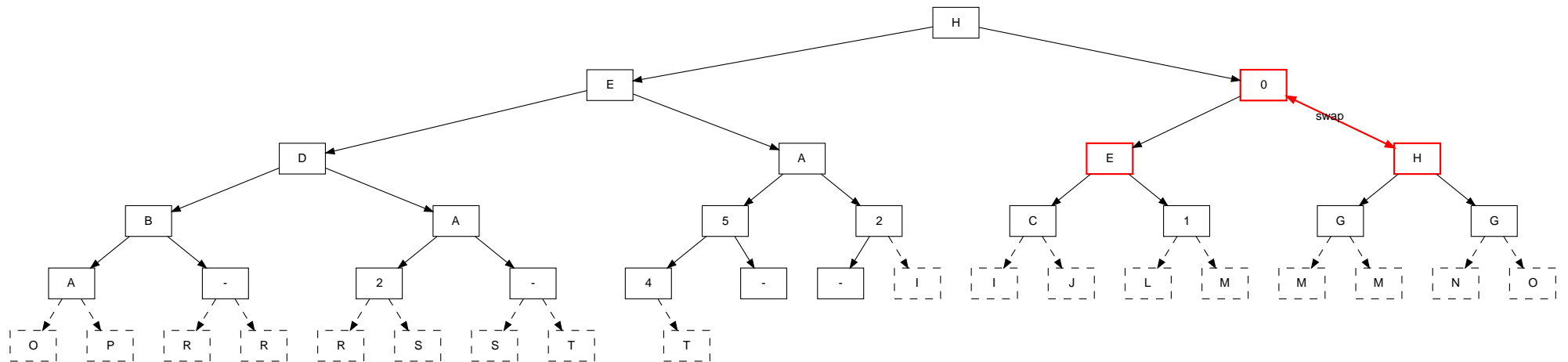
# Step 142: Heapify

[0, E, H, D, A, E, H, B, A, 5, 2, C, 1, G, G, A, -, 2, -, 4, -, - || I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



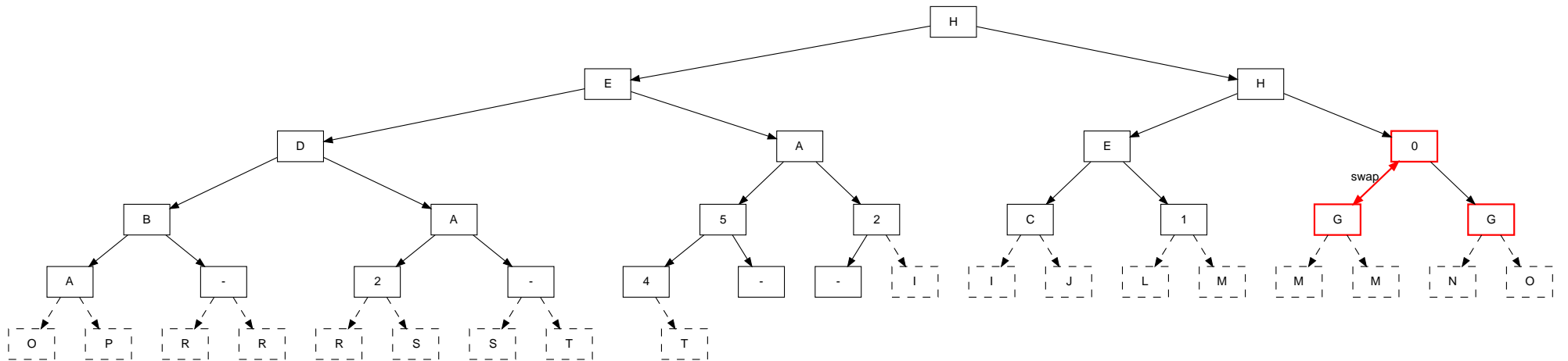
# Step 143: Heapify

[H, E, 0, D, A, E, H, B, A, 5, 2, C, 1, G, G, A, -, 2, -, 4, -, - || I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 144: Heapify

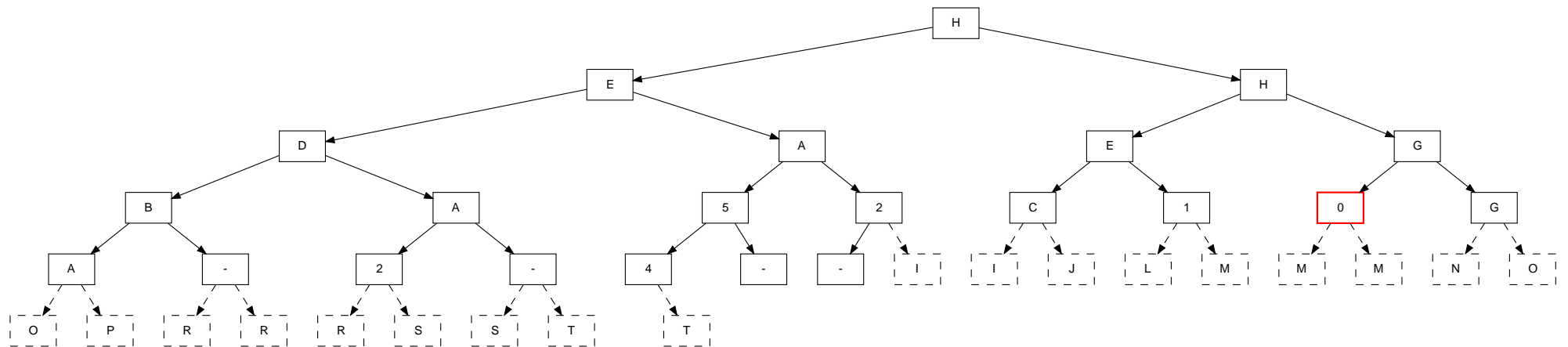
[H, E, H, D, A, E, 0, B, A, 5, 2, C, 1, G, G, A, -, 2, -, 4, -, - || I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





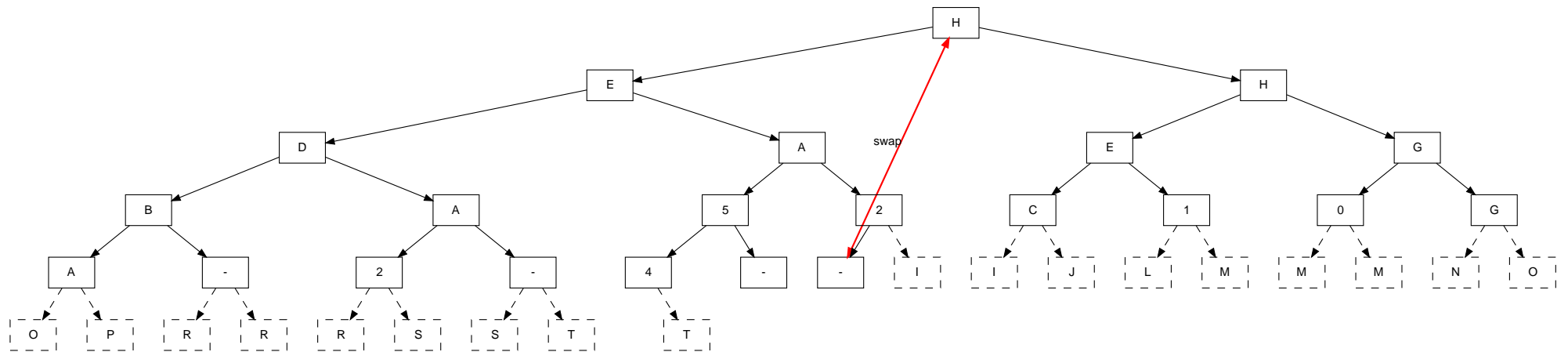
# Step 145: Heapify

[H, E, H, D, A, E, G, B, A, 5, 2, C, 1, 0, G, A, -, 2, -, 4, -, - || I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



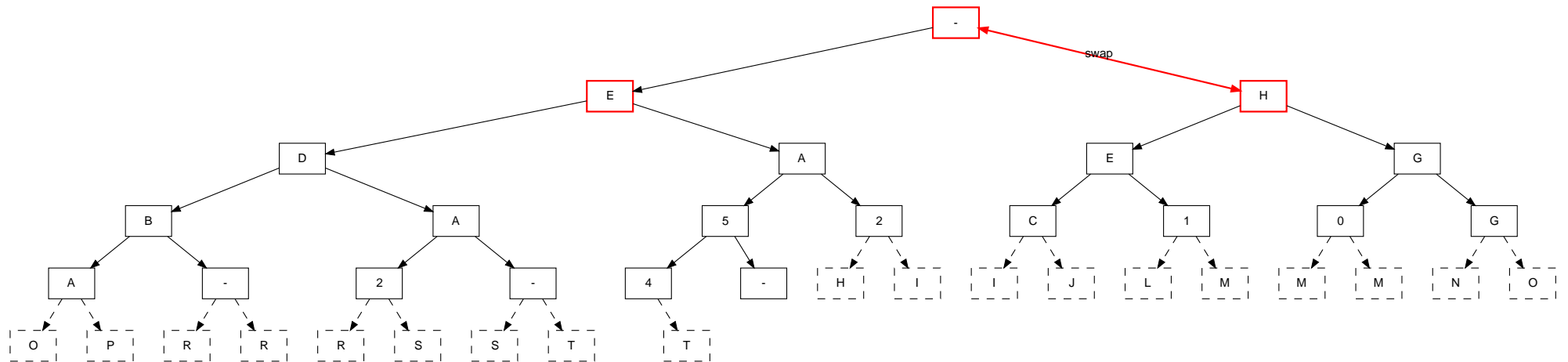
# Step 146: Sort-swap

[H, E, H, D, A, E, G, B, A, 5, 2, C, 1, 0, G, A, -, 2, -, 4, -, - || I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



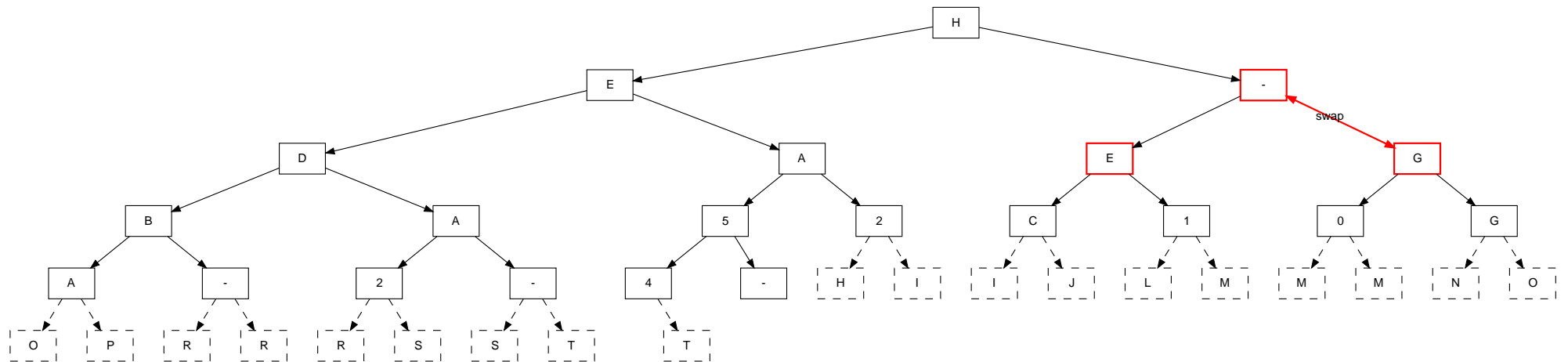
# Step 147: Heapify

[-, E, H, D, A, E, G, B, A, 5, 2, C, 1, 0, G, A, -, 2, -, 4, - || H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



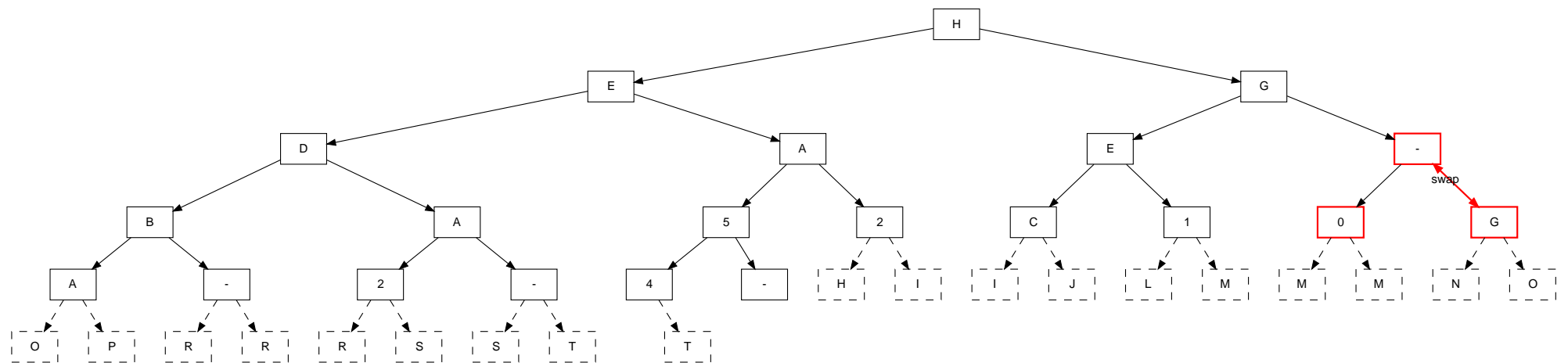
# Step 148: Heapify

[H, E, -, D, A, E, G, B, A, 5, 2, C, 1, 0, G, A, -, 2, -, 4, - || H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



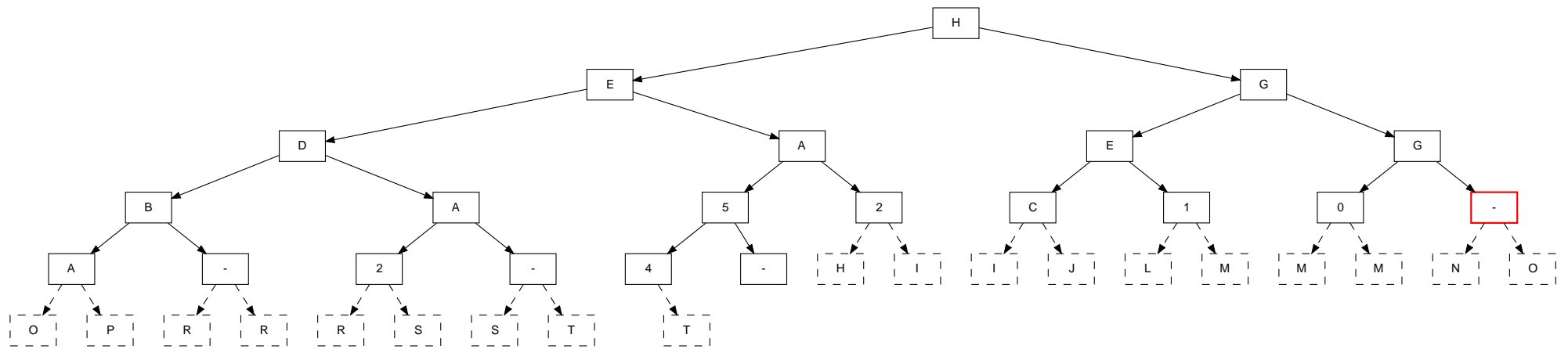
# Step 149: Heapify

[H, E, G, D, A, E, -, B, A, 5, 2, C, 1, 0, G, A, -, 2, -, 4, - || H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



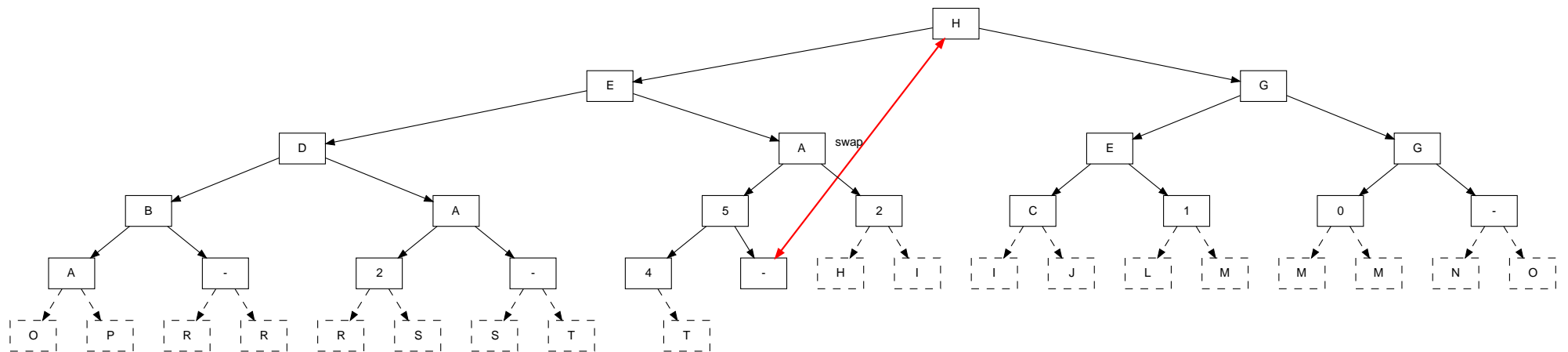
# Step 150: Heapify

[H, E, G, D, A, E, G, B, A, 5, 2, C, 1, 0, -, A, -, 2, -, 4, - || H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



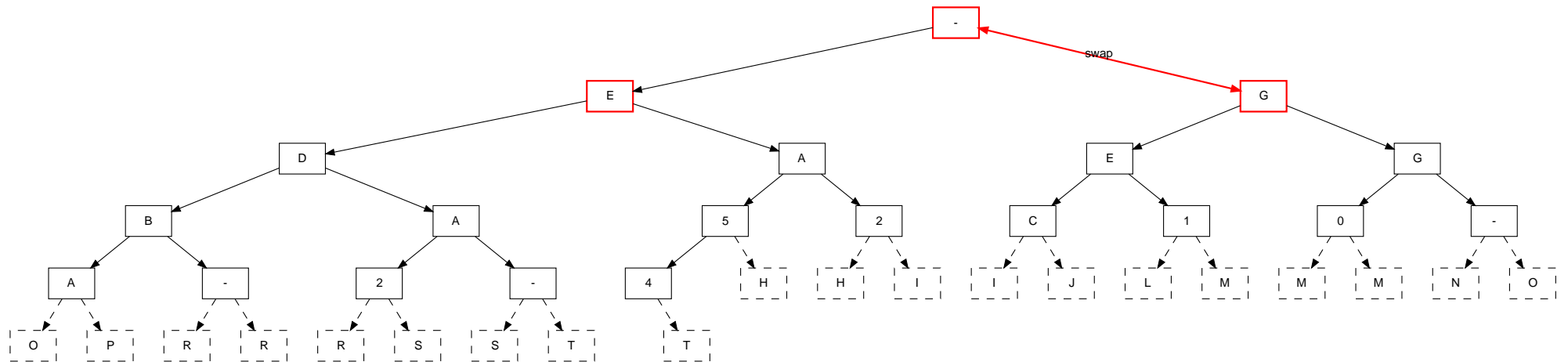
# Step 151: Sort-swap

[H, E, G, D, A, E, G, B, A, 5, 2, C, 1, 0, -, A, -, 2, -, 4, - || H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 152: Heapify

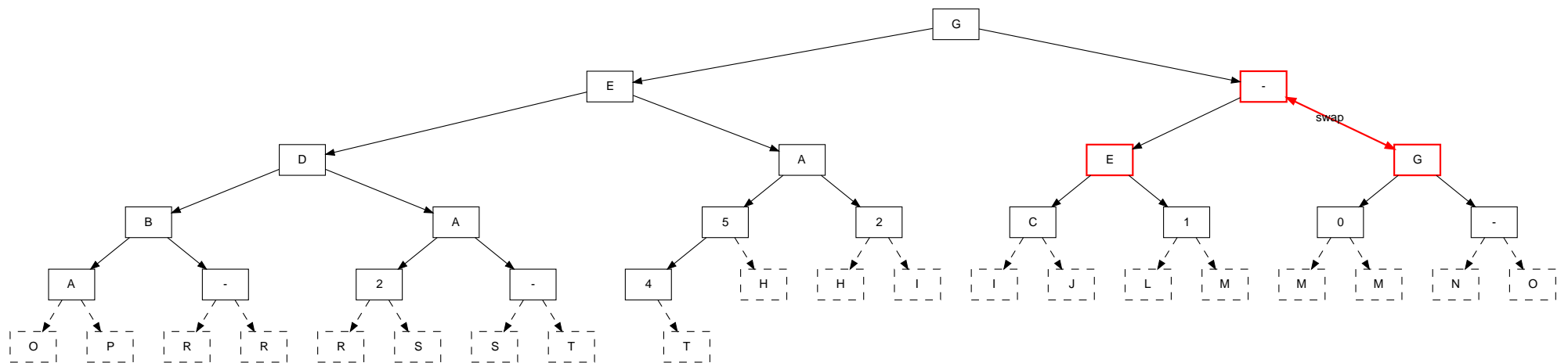
[-, E, G, D, A, E, G, B, A, 5, 2, C, 1, 0, -, A, -, 2, -, 4 || H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





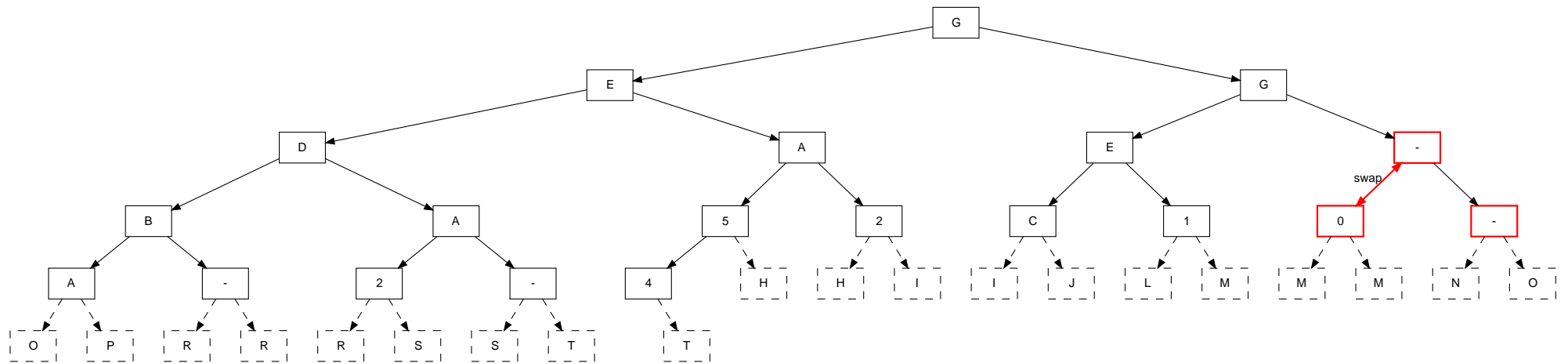
# Step 153: Heapify

[G, E, -, D, A, E, G, B, A, 5, 2, C, 1, 0, -, A, -, 2, -, 4 || H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



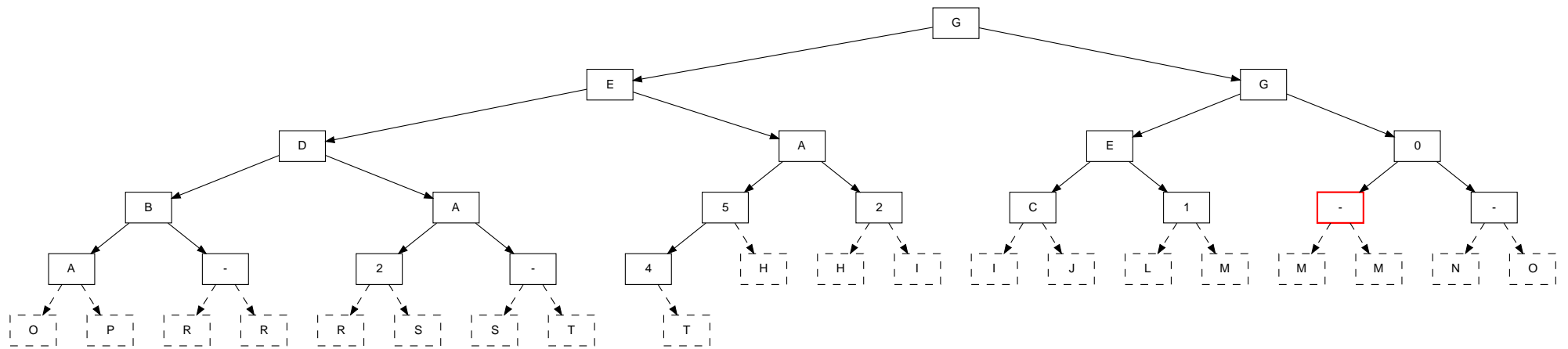
# Step 154: Heapify

[G, E, G, D, A, E, -, B, A, 5, 2, C, 1, 0, -, A, -, 2, -, 4 || H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



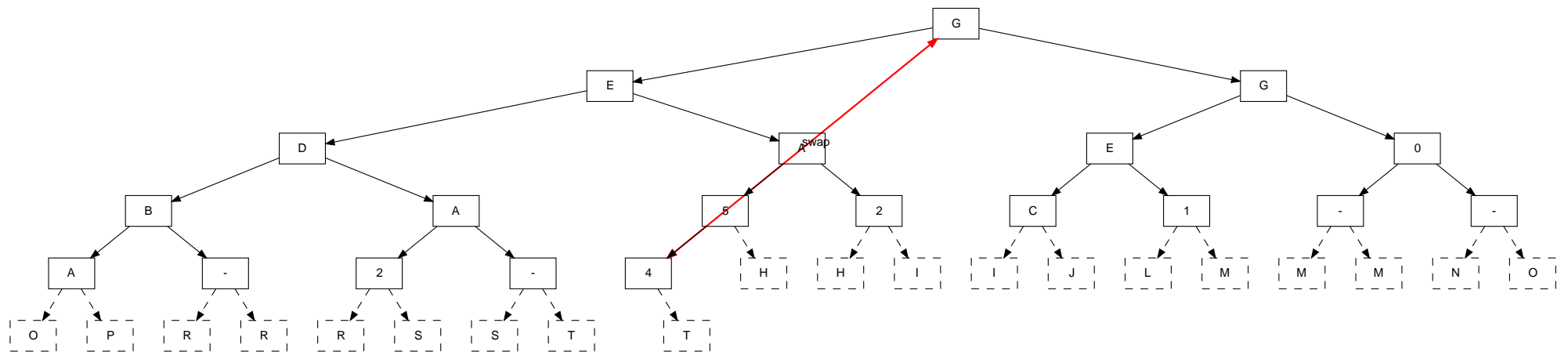
# Step 155: Heapify

[G, E, G, D, A, E, 0, B, A, 5, 2, C, 1, -, -, A, -, 2, -, 4 || H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



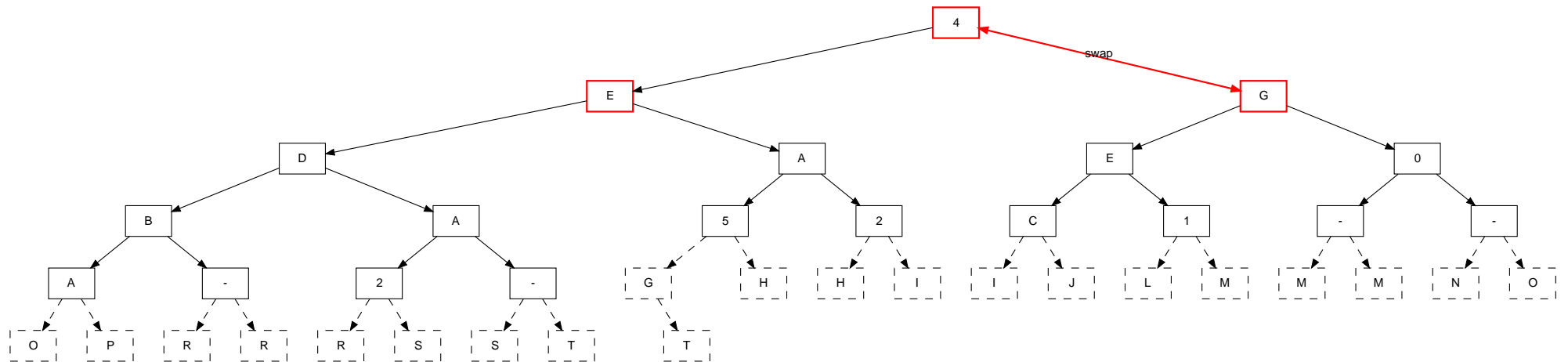
# Step 156: Sort-swap

[G, E, G, D, A, E, 0, B, A, 5, 2, C, 1, -, -, A, -, 2, -, 4 || H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



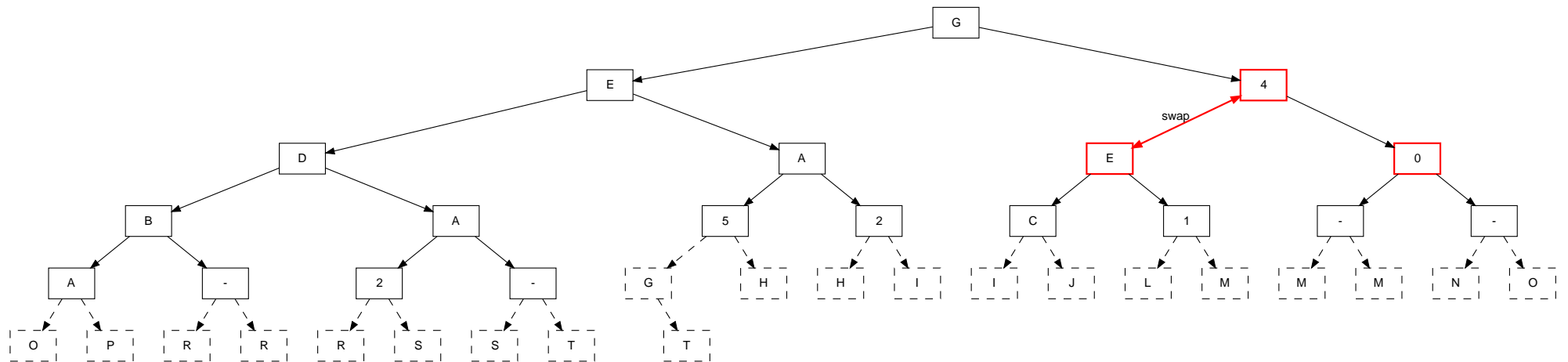
# Step 157: Heapify

[4, E, G, D, A, E, 0, B, A, 5, 2, C, 1, -, -, A, -, 2, - || G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



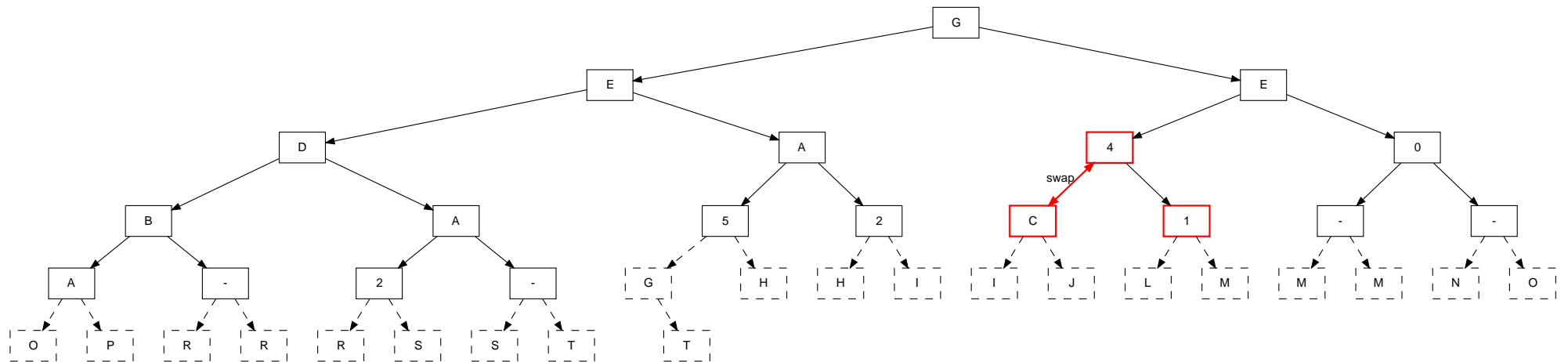
# Step 158: Heapify

[G, E, 4, D, A, E, 0, B, A, 5, 2, C, 1, -, -, A, -, 2, - || G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



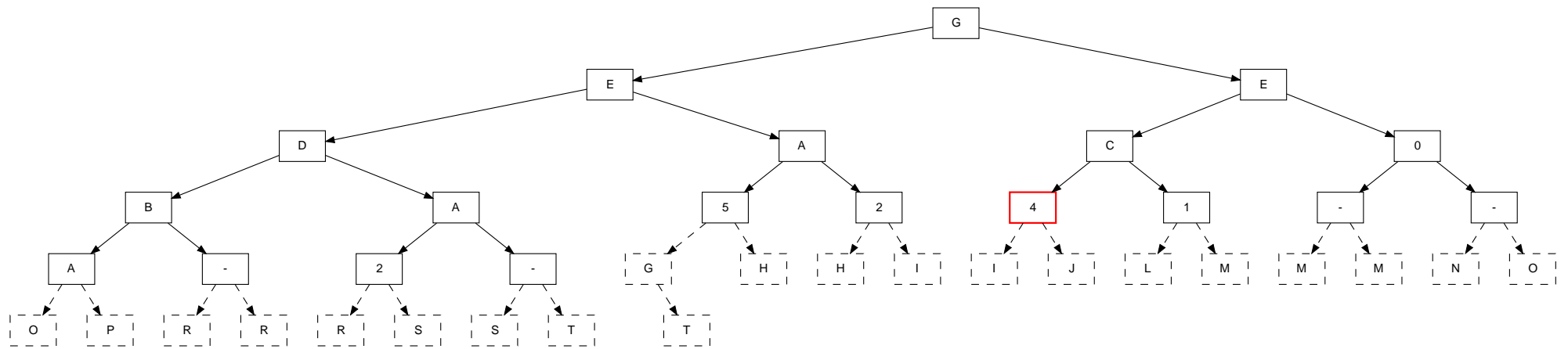
# Step 159: Heapify

[G, E, E, D, A, 4, 0, B, A, 5, 2, C, 1, -, -, A, -, 2, - || G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 160: Heapify

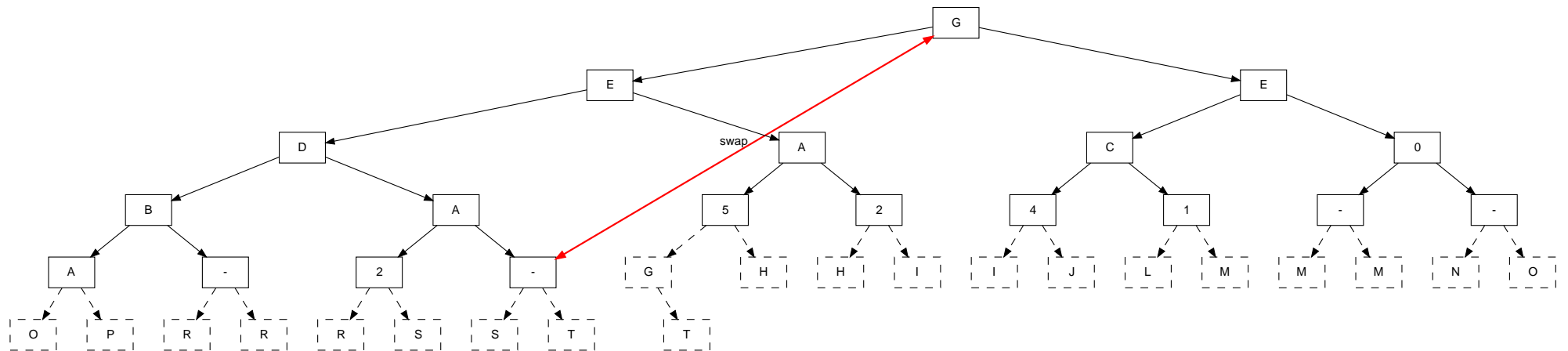
[G, E, E, D, A, C, 0, B, A, 5, 2, 4, 1, -, -, A, -, 2, - || G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





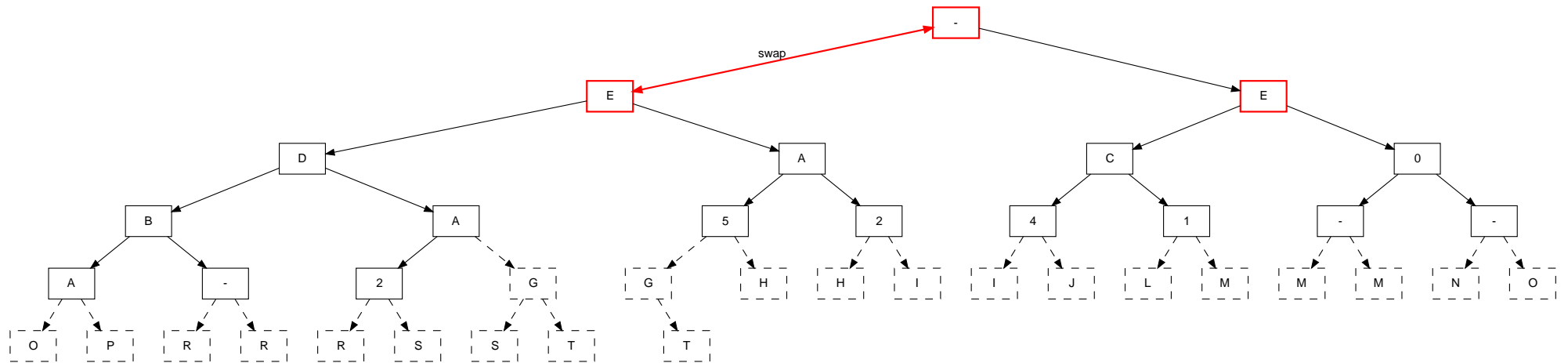
# Step 161: Sort-swap

[G, E, E, D, A, C, 0, B, A, 5, 2, 4, 1, -, -, A, -, 2, - || G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



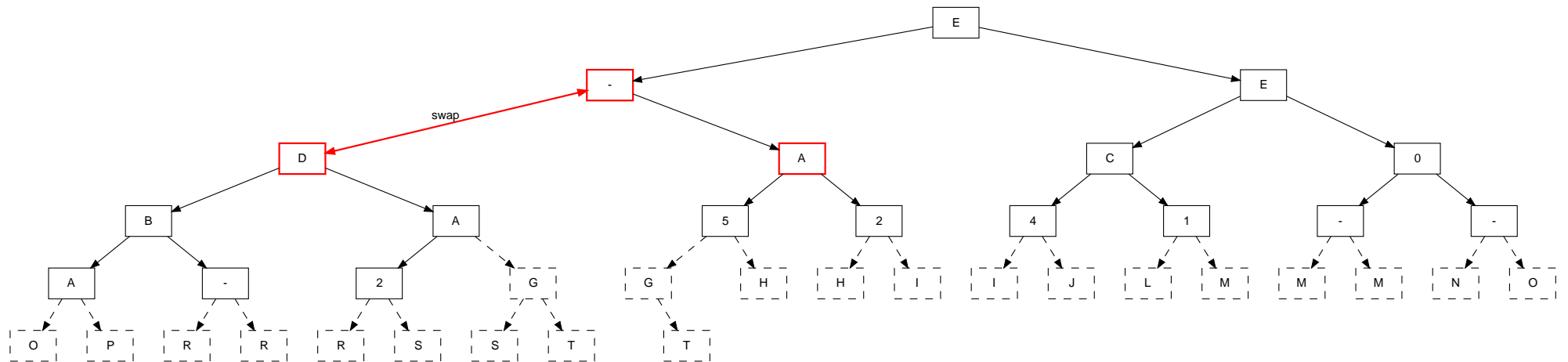
# Step 162: Heapify

[-, E, E, D, A, C, 0, B, A, 5, 2, 4, 1, -, -, A, -, 2 || G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



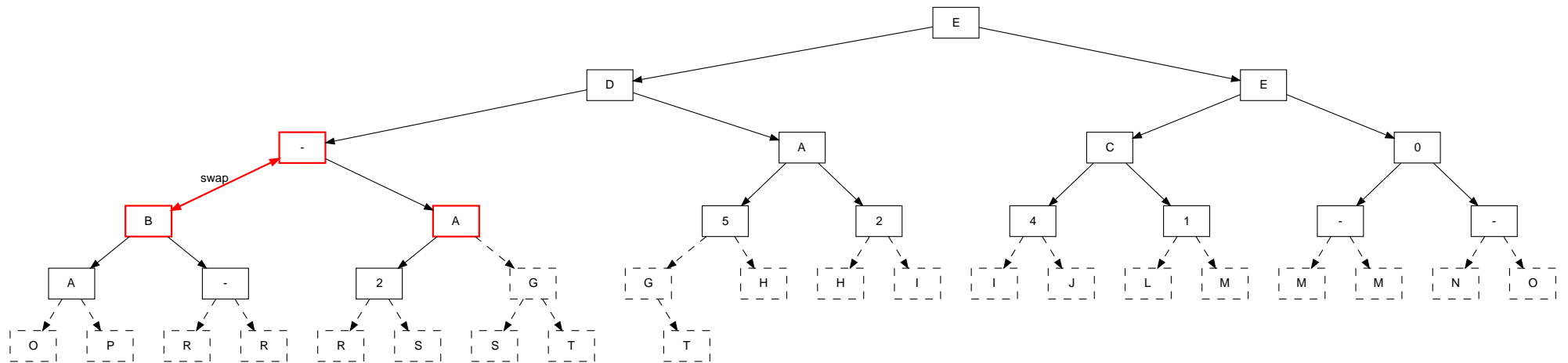
# Step 163: Heapify

[E, -, E, D, A, C, 0, B, A, 5, 2, 4, 1, -, -, A, -, 2 || G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



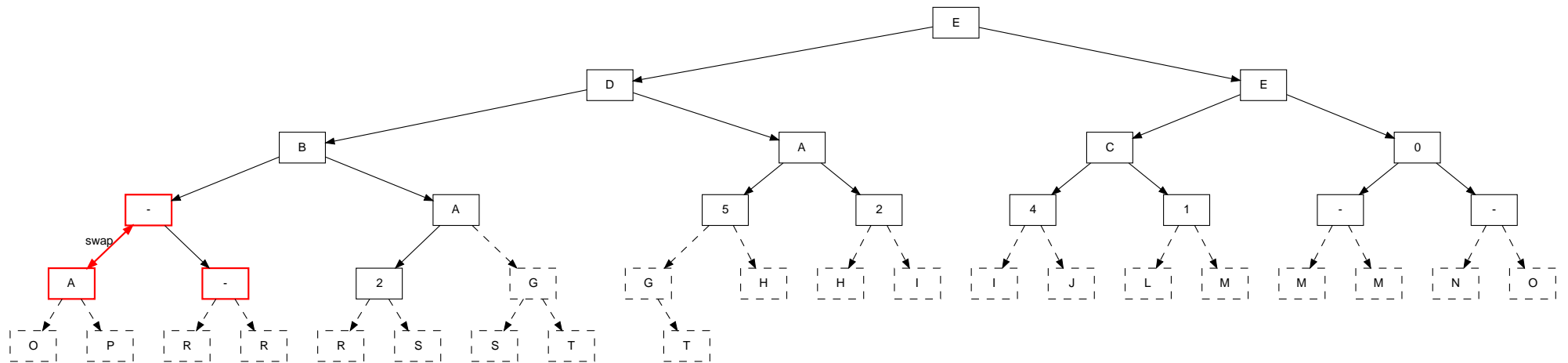
# Step 164: Heapify

[E, D, E, -, A, C, 0, B, A, 5, 2, 4, 1, -, -, A, -, 2 || G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



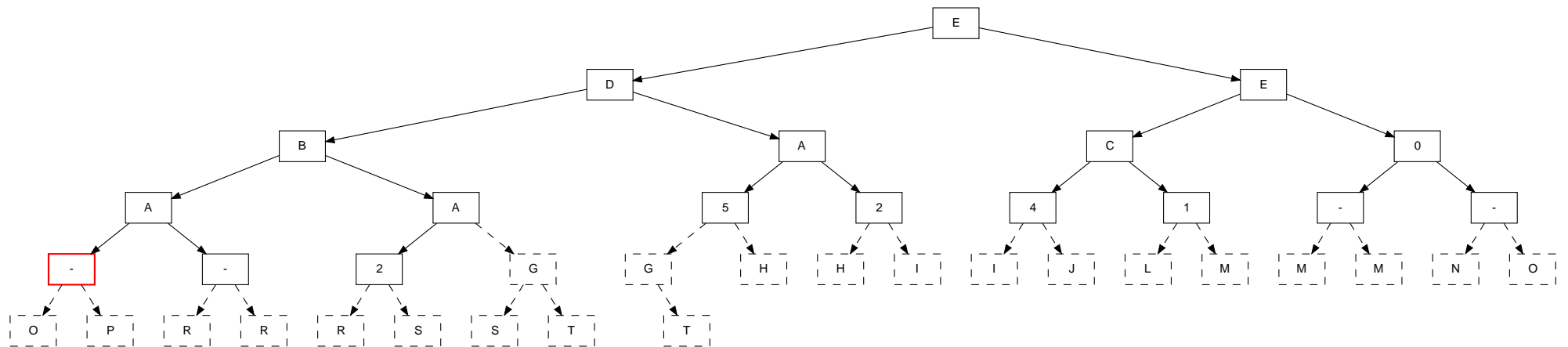
# Step 165: Heapify

[E, D, E, B, A, C, 0, -, A, 5, 2, 4, 1, -, -, A, -, 2 || G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



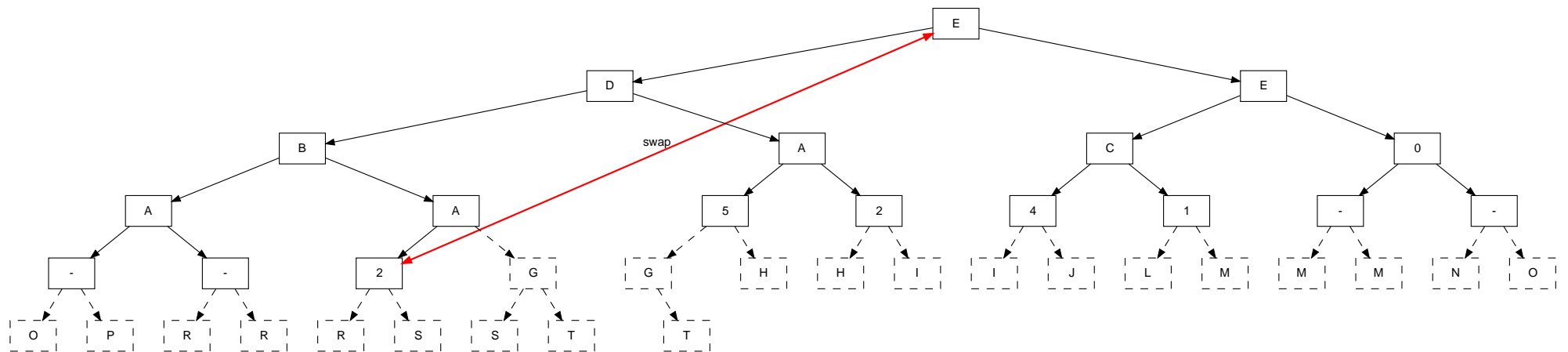
# Step 166: Heapify

[E, D, E, B, A, C, 0, A, A, 5, 2, 4, 1, -, -, -, -, 2 || G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



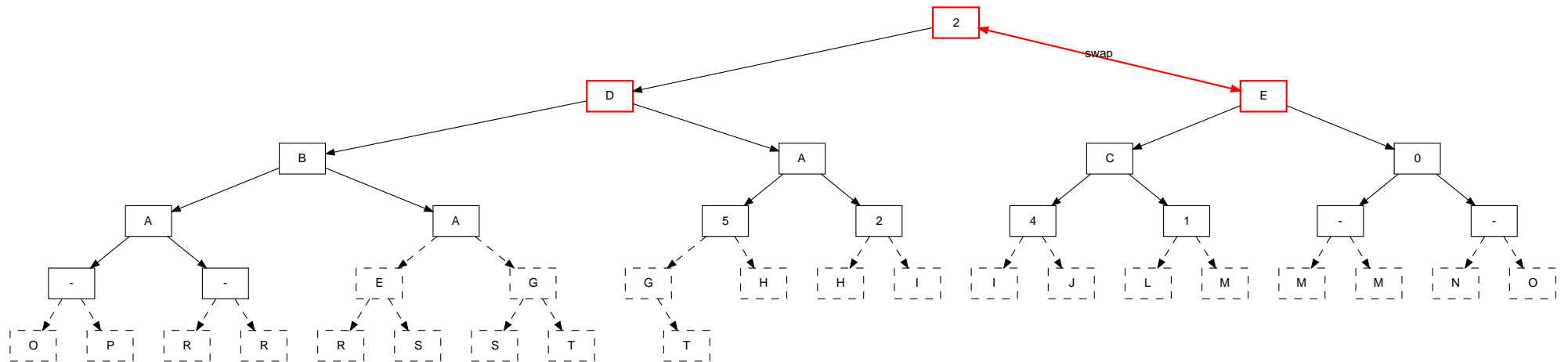
# Step 167: Sort-swap

[E, D, E, B, A, C, 0, A, A, 5, 2, 4, 1, -, -, -, -, 2 || G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T,  
T]



# Step 168: Heapify

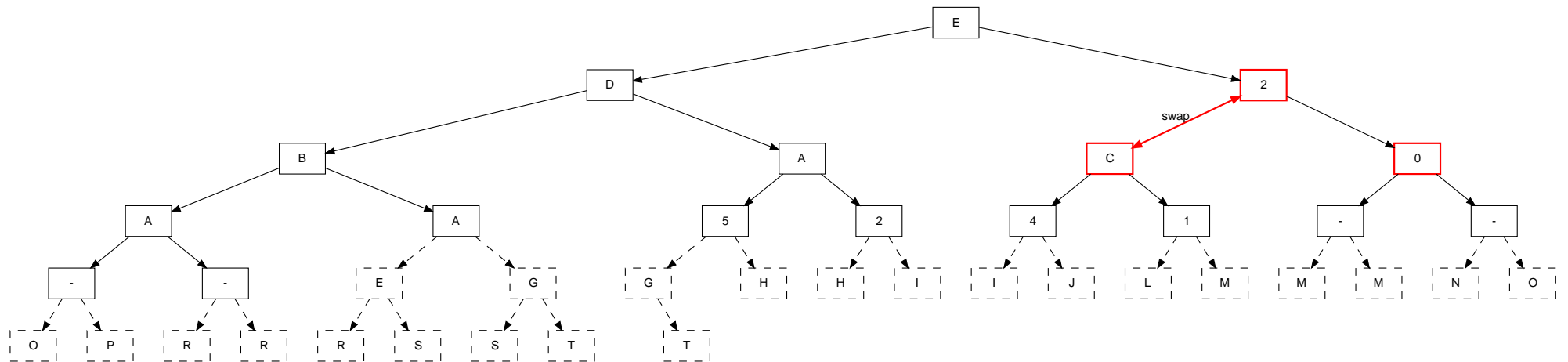
[2, D, E, B, A, C, 0, A, A, 5, 2, 4, 1, -, -, -, - || E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





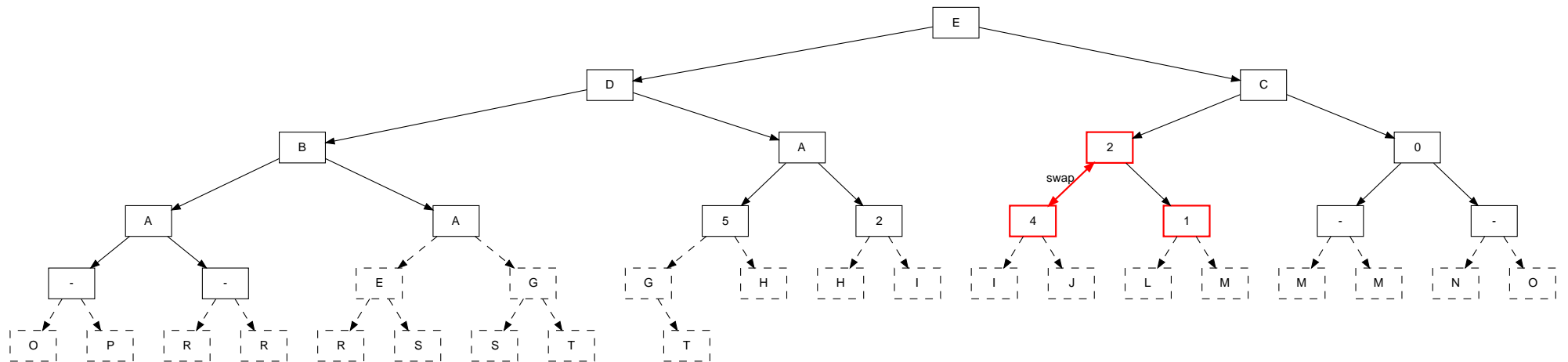
# Step 169: Heapify

[E, D, 2, B, A, C, 0, A, A, 5, 2, 4, 1, -, -, -, - || E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



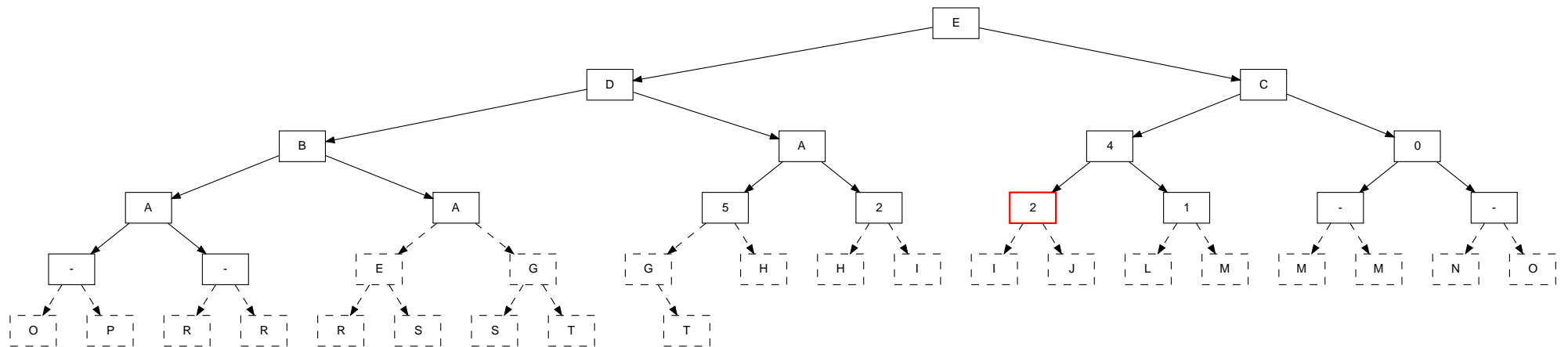
# Step 170: Heapify

[E, D, C, B, A, 2, 0, A, A, 5, 2, 4, 1, -, -, -, - || E, G, G, H, H, I, I, J, L, M, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



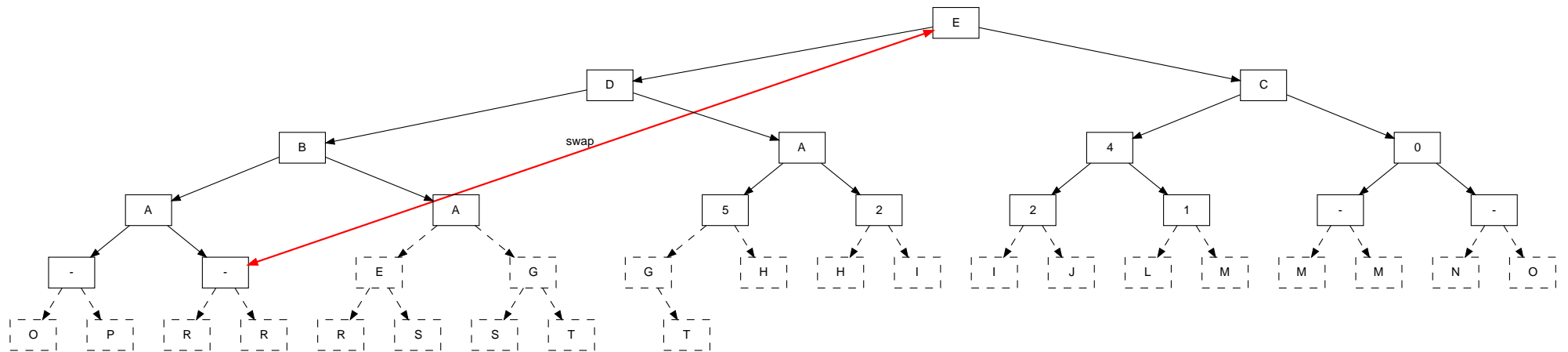
# Step 171: Heapify

[E, D, C, B, A, 4, 0, A, A, 5, 2, 2, 1, -, -, -, - || E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



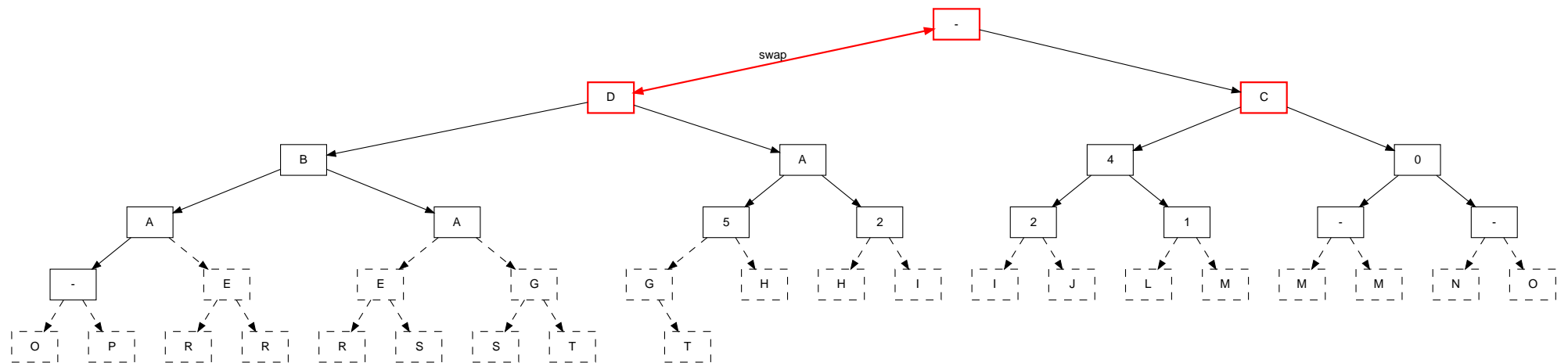
# Step 172: Sort-swap

[E, D, C, B, A, 4, 0, A, A, 5, 2, 2, 1, -, -, -, - || E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



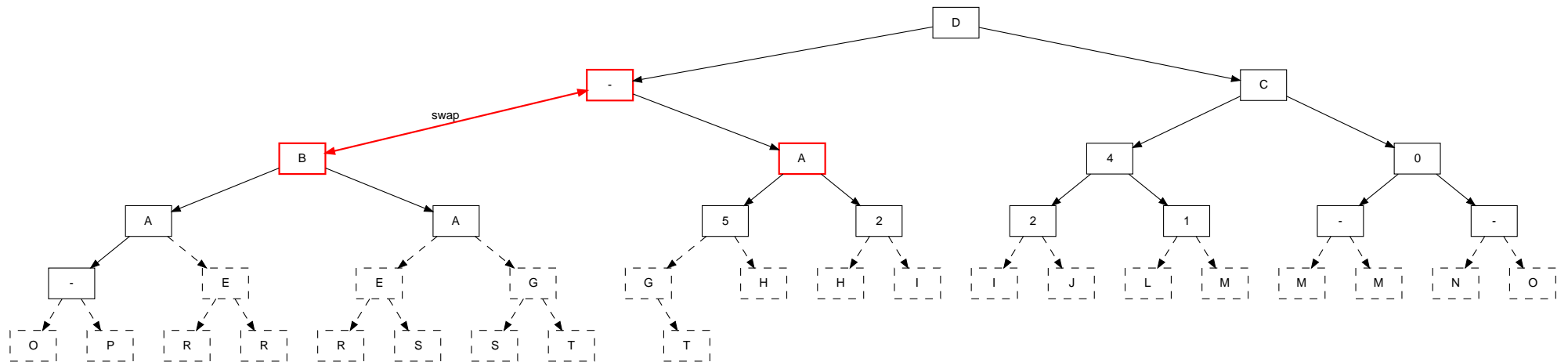
# Step 173: Heapify

[-, D, C, B, A, 4, 0, A, A, 5, 2, 2, 1, -, -, - || E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



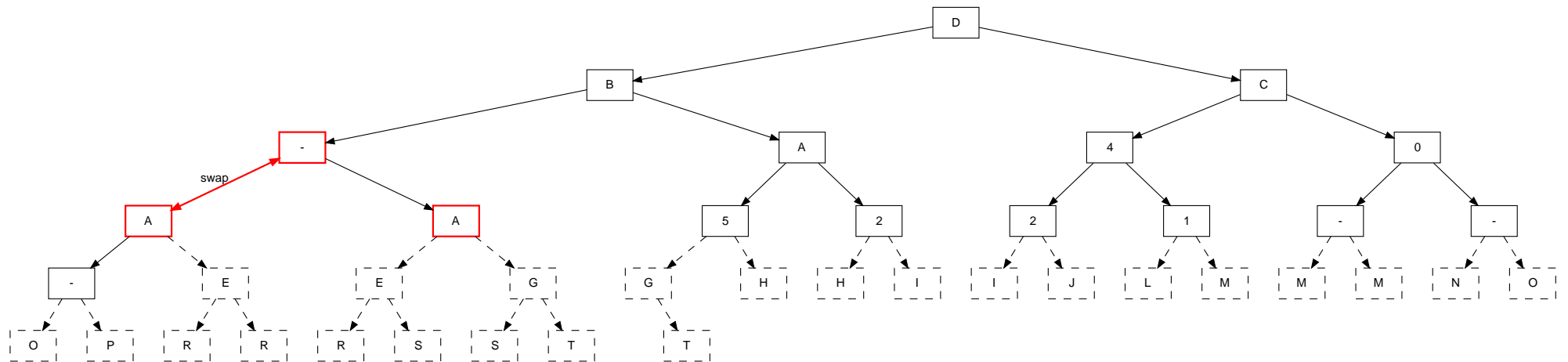
# Step 174: Heapify

[D, -, C, B, A, 4, 0, A, A, 5, 2, 2, 1, -, -, - || E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



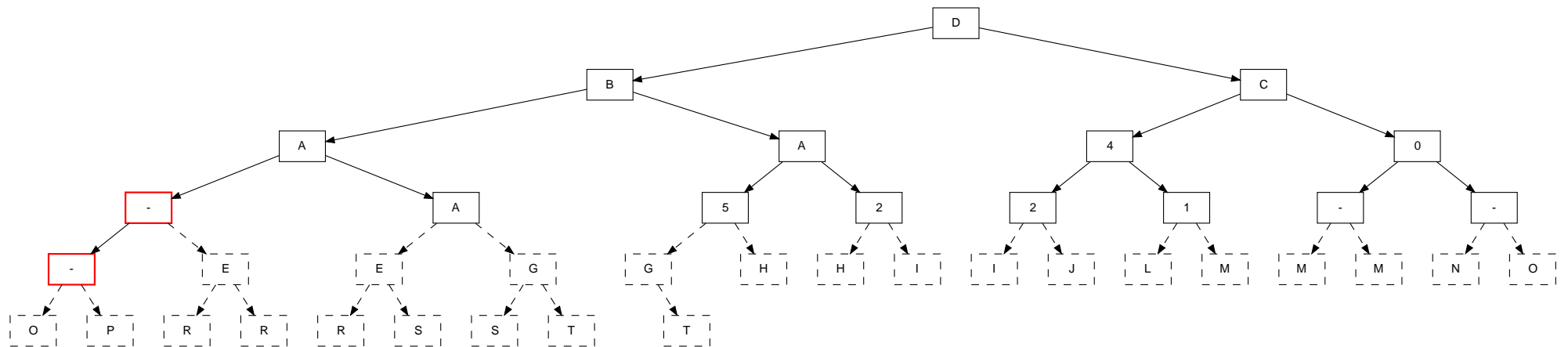
# Step 175: Heapify

[D, B, C, -, A, 4, 0, A, A, 5, 2, 2, 1, -, -, - || E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 176: Heapify

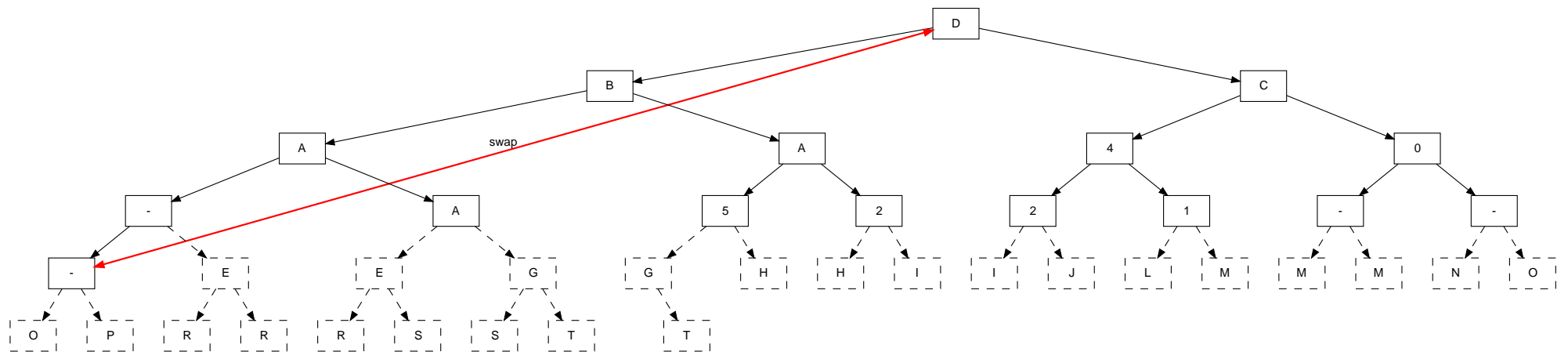
[D, B, C, A, A, 4, 0, -, A, 5, 2, 2, 1, -, -, - || E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





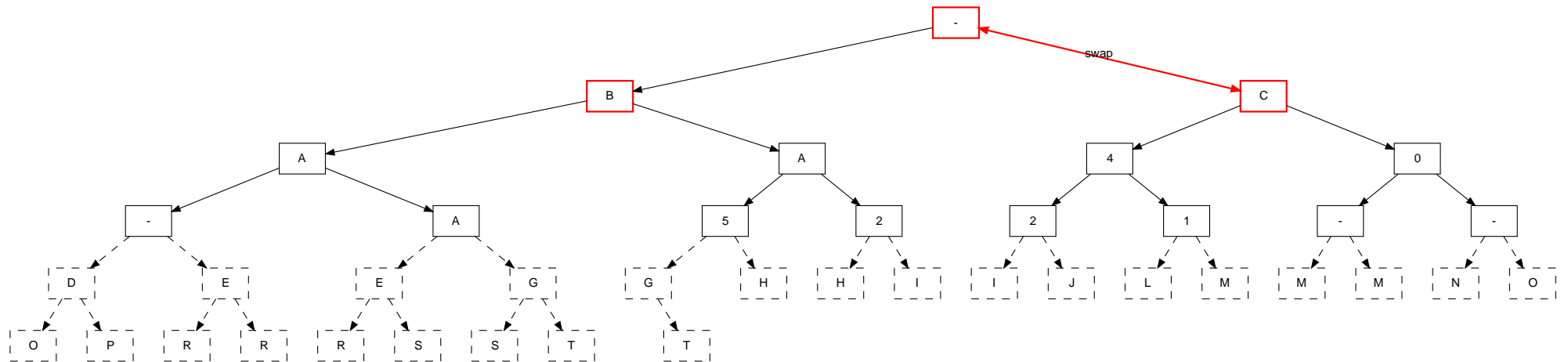
# Step 177: Sort-swap

[D, B, C, A, A, 4, 0, -, A, 5, 2, 2, 1, -, -, - || E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



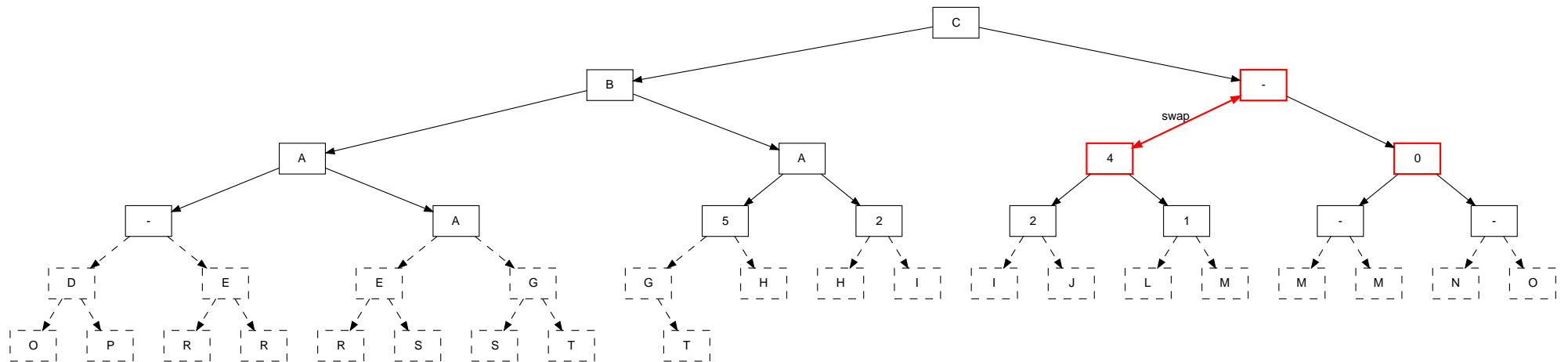
# Step 178: Heapify

[-, B, C, A, A, 4, 0, -, A, 5, 2, 2, 1, -, - || D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



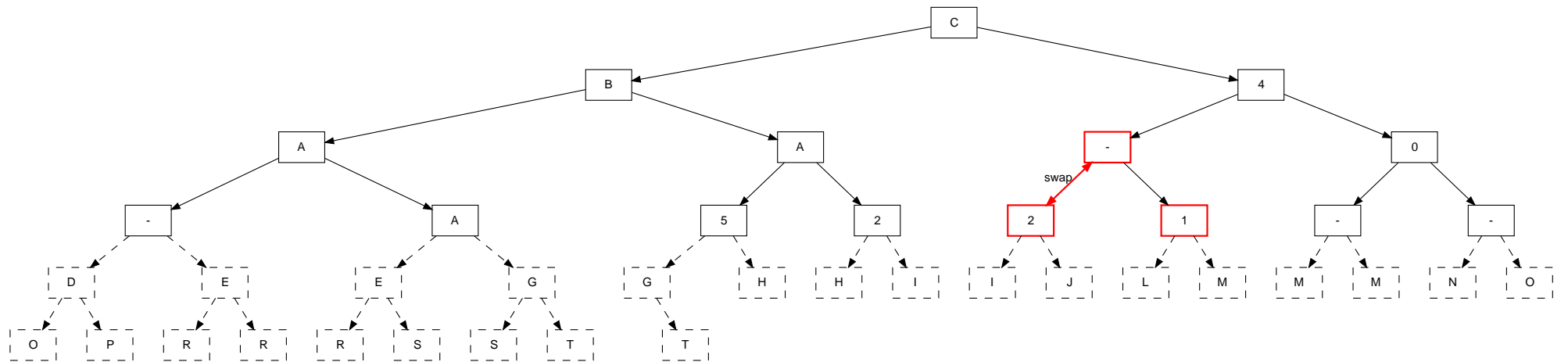
# Step 179: Heapify

[C, B, -, A, A, 4, 0, -, A, 5, 2, 2, 1, -, - || D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



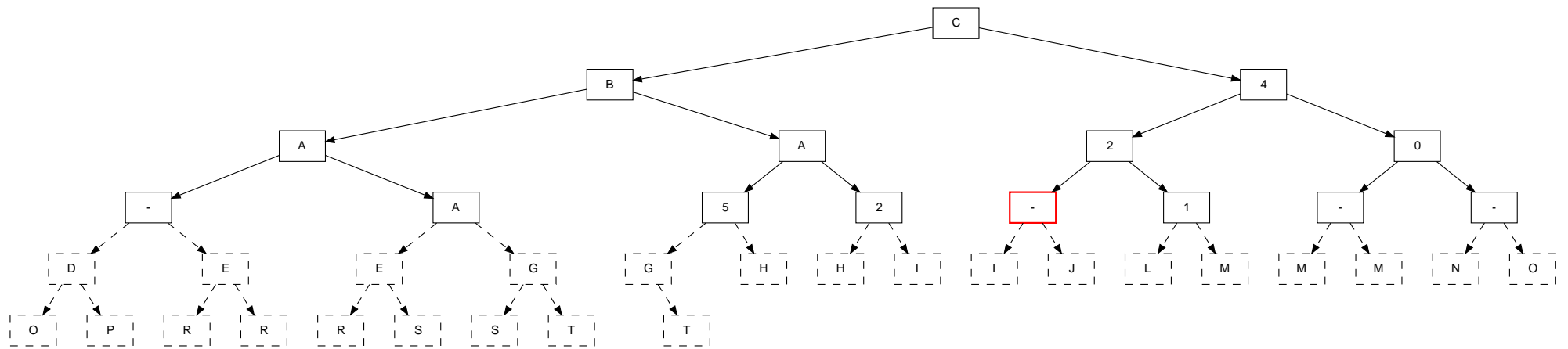
# Step 180: Heapify

[C, B, 4, A, A, -, 0, -, A, 5, 2, 2, 1, -, - || D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



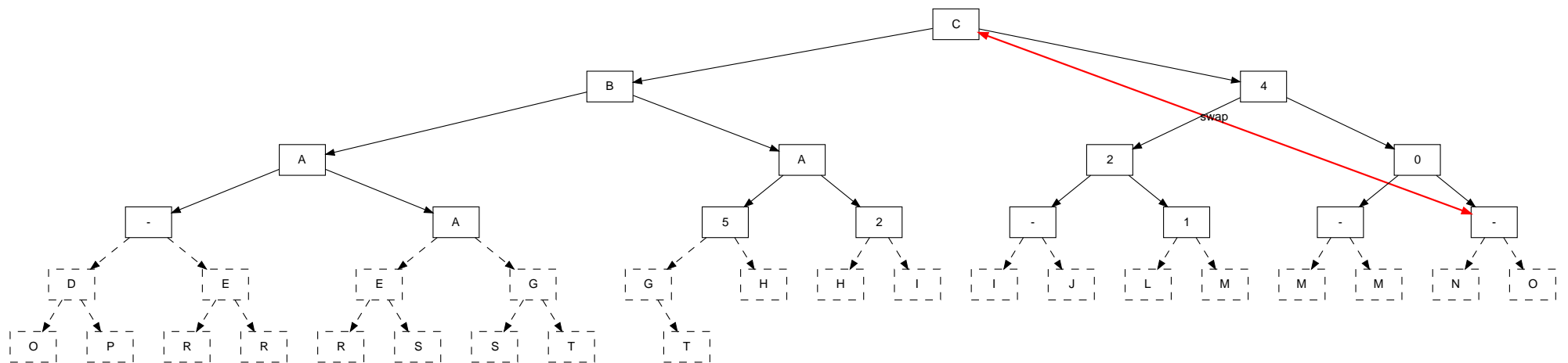
# Step 181: Heapify

[C, B, 4, A, A, 2, 0, -, A, 5, 2, -, 1, -, - || D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



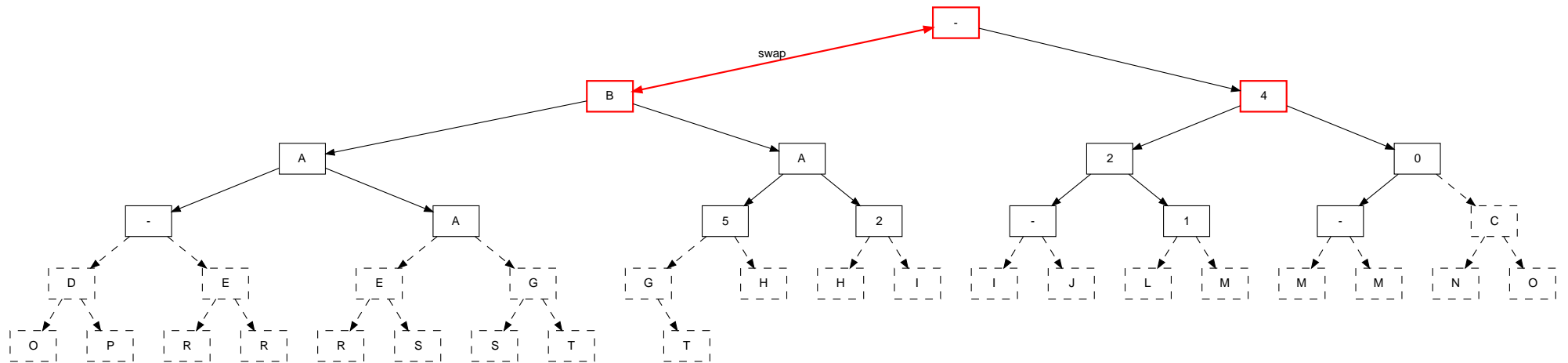
# Step 182: Sort-swap

[C, B, 4, A, A, 2, 0, -, A, 5, 2, -, 1, -, - || D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



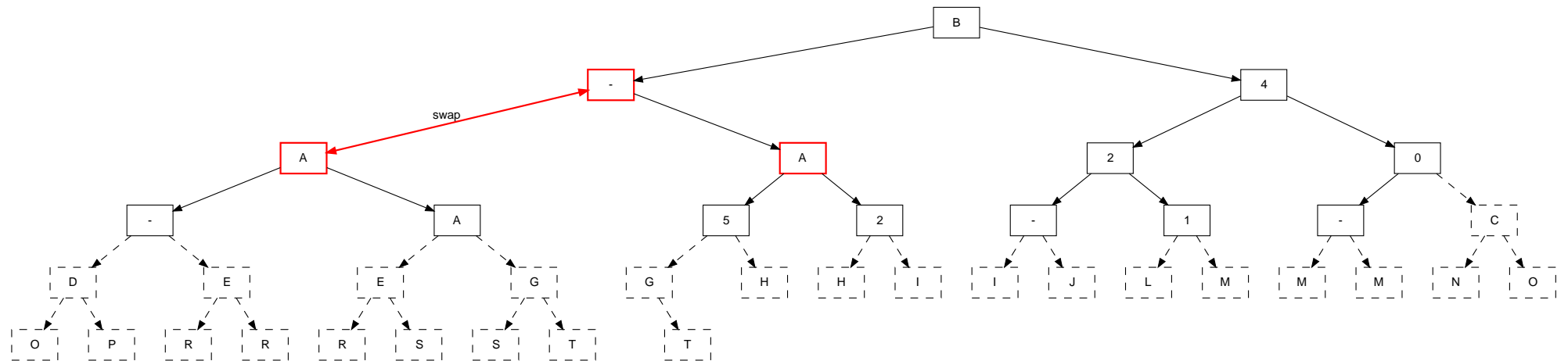
# Step 183: Heapify

[-, B, 4, A, A, 2, 0, -, A, 5, 2, -, 1, - || C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 184: Heapify

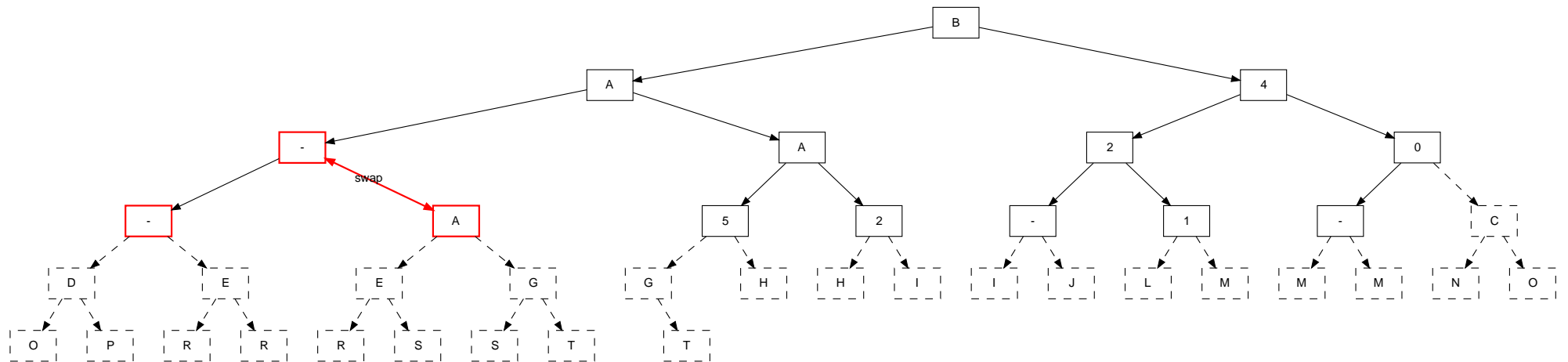
[B, -, 4, A, A, 2, 0, -, A, 5, 2, -, 1, - || C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





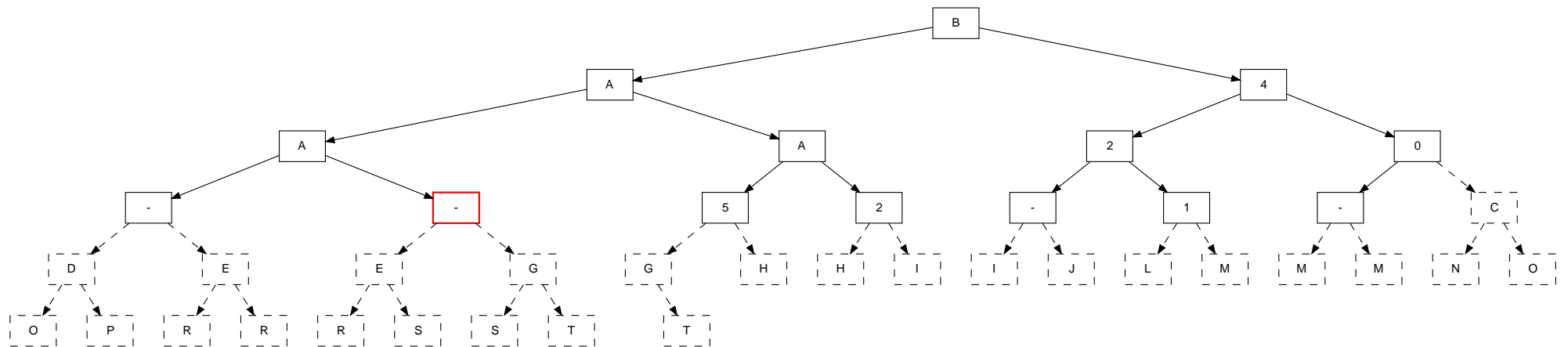
# Step 185: Heapify

[B, A, 4, -, A, 2, 0, -, A, 5, 2, -, 1, - || C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



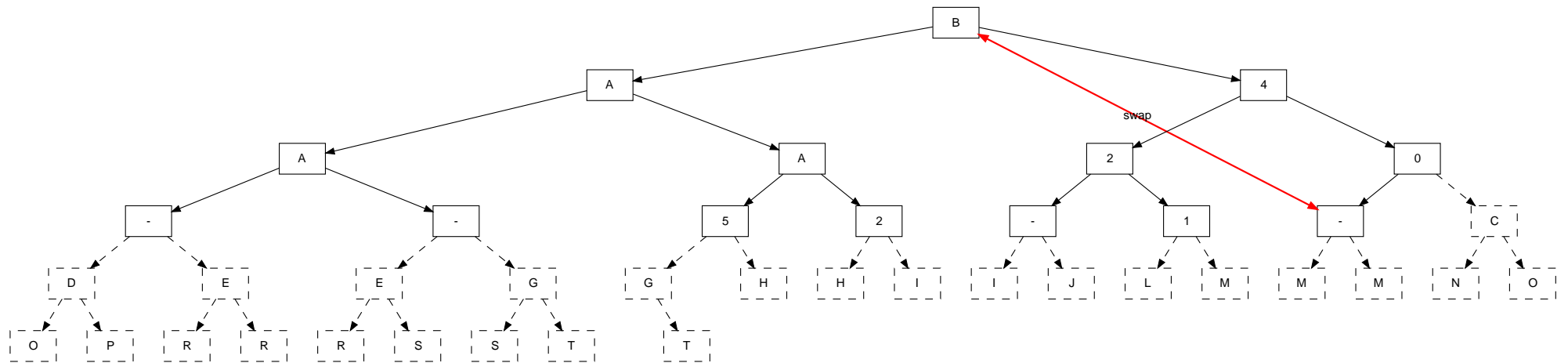
# Step 186: Heapify

[B, A, 4, A, A, 2, 0, -, -, 5, 2, -, 1, - || C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



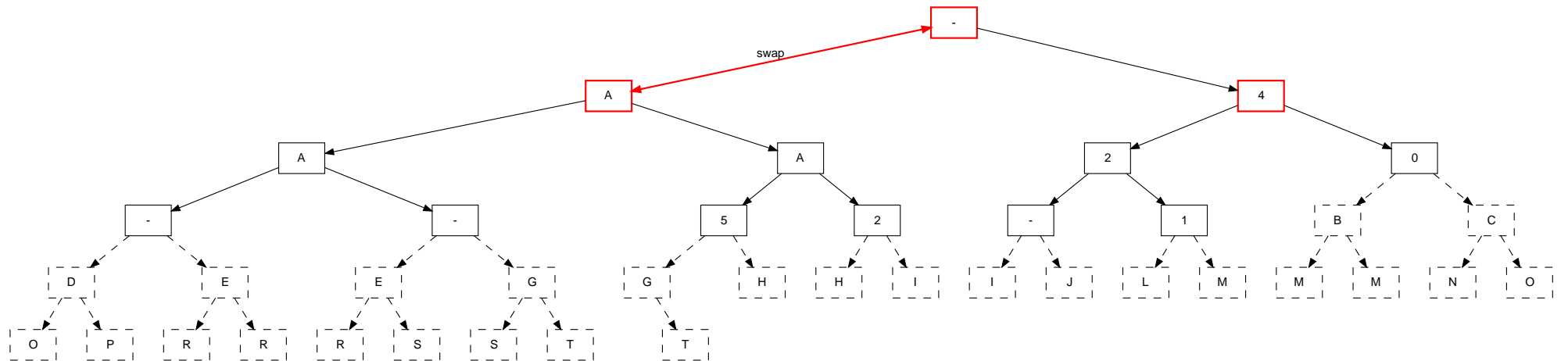
# Step 187: Sort-swap

[B, A, 4, A, A, 2, 0, -, -, 5, 2, -, 1, - || C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



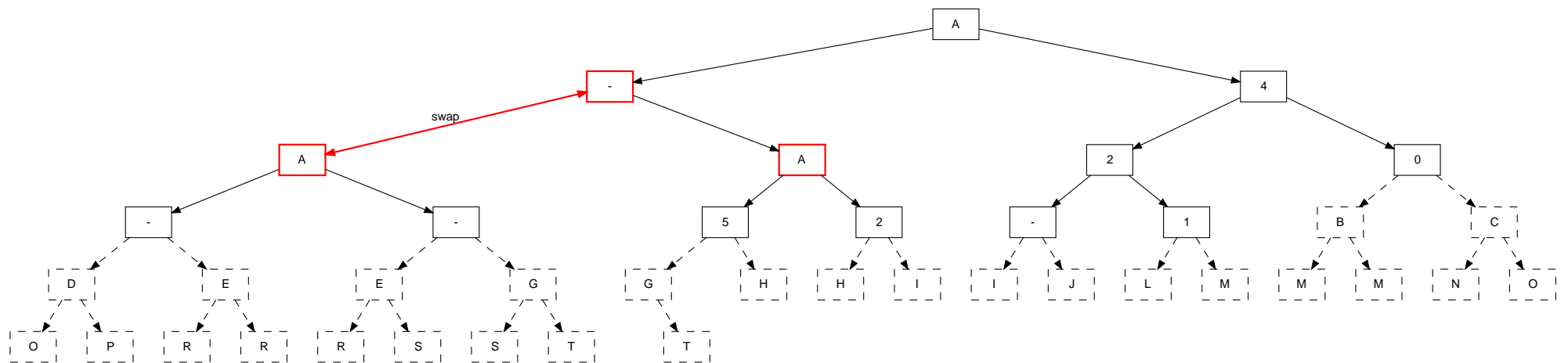
# Step 188: Heapify

[-, A, 4, A, A, 2, 0, -, -, 5, 2, -, 1 || B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



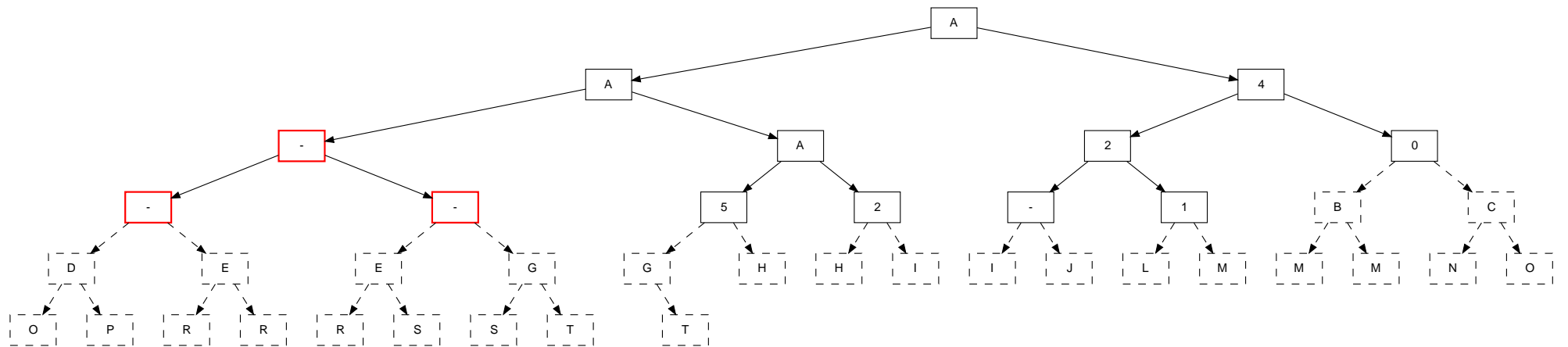
# Step 189: Heapify

[A, -, 4, A, A, 2, 0, -, -, 5, 2, -, 1 || B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



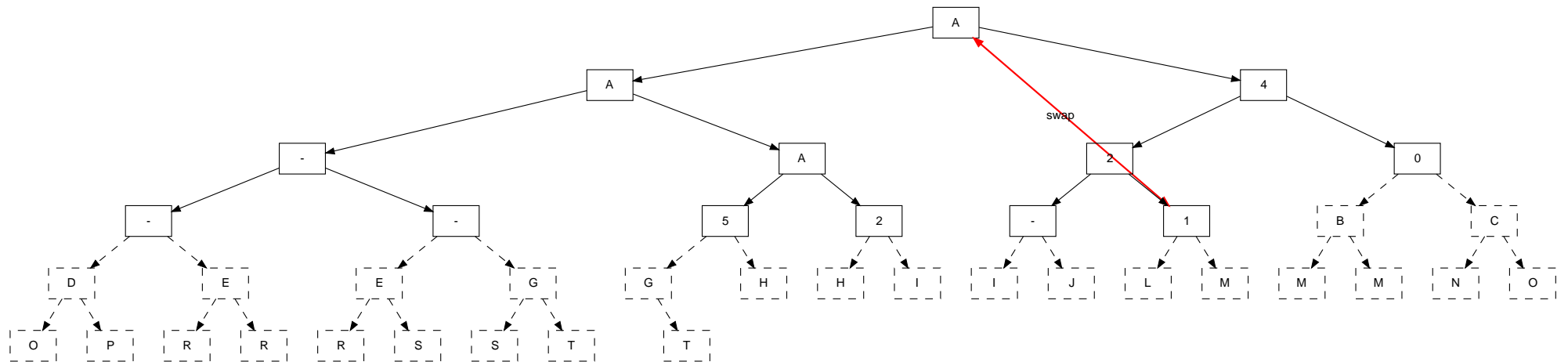
# Step 190: Heapify

[A, A, 4, -, A, 2, 0, -, -, 5, 2, -, 1 || B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T,  
T]



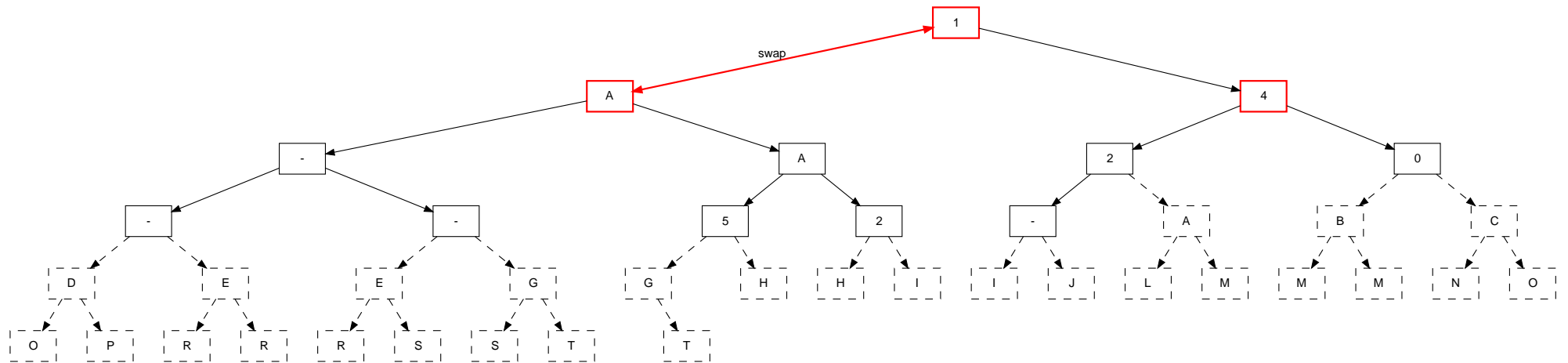
# Step 191: Sort-swap

[A, A, 4, -, A, 2, 0, -, -, 5, 2, -, 1 || B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 192: Heapify

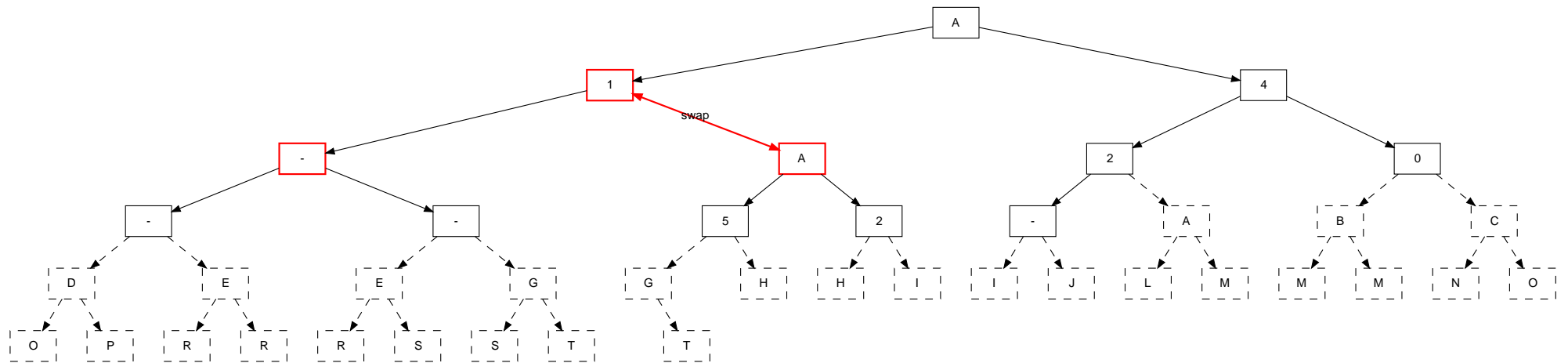
[1, A, 4, -, A, 2, 0, -, -, 5, 2, - || A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





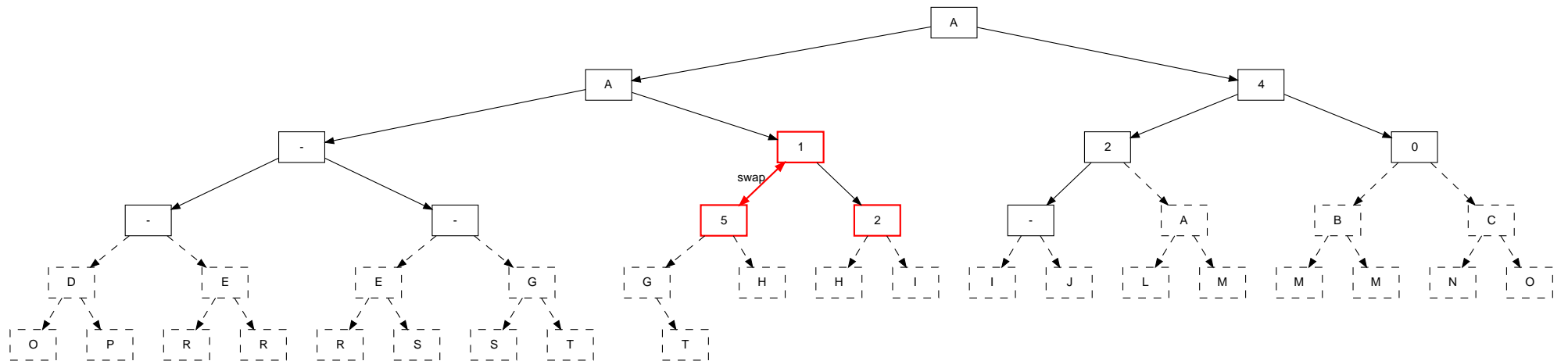
# Step 193: Heapify

[A, 1, 4, -, A, 2, 0, -, -, 5, 2, - || A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



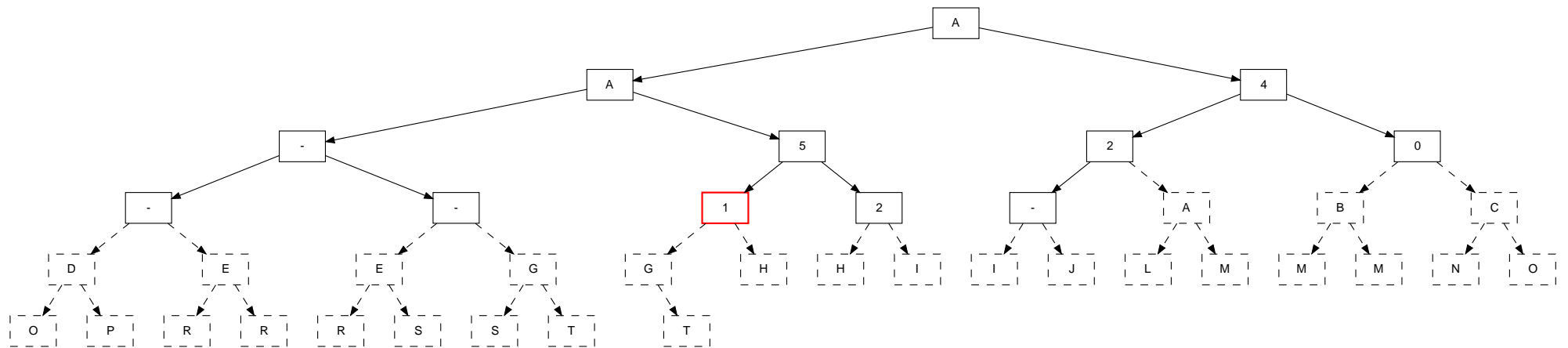
# Step 194: Heapify

[A, A, 4, -, 1, 2, 0, -, -, 5, 2, - || A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



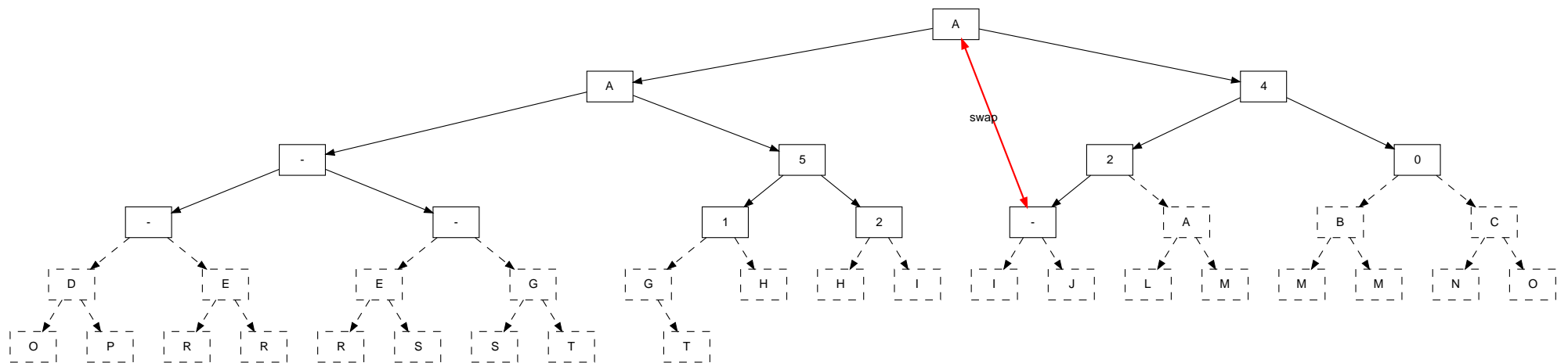
# Step 195: Heapify

[A, A, 4, -, 5, 2, 0, -, -, 1, 2, - || A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



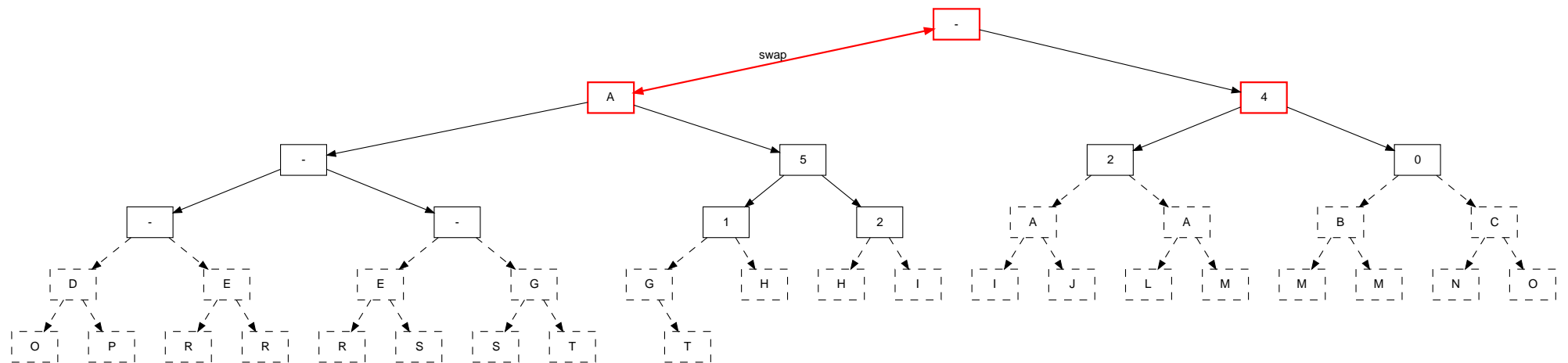
# Step 196: Sort-swap

[A, A, 4, -, 5, 2, 0, -, -, 1, 2, - || A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



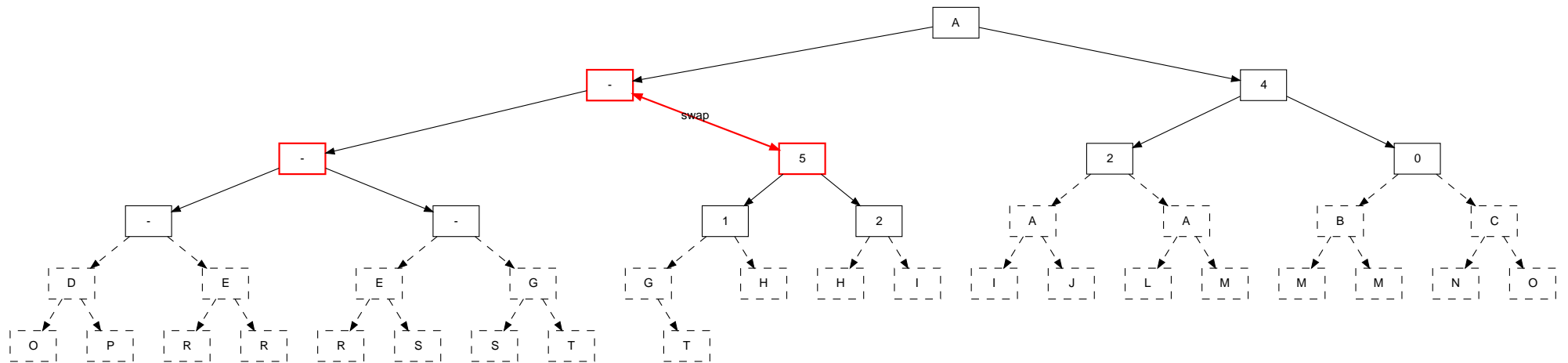
# Step 197: Heapify

[-, A, 4, -, 5, 2, 0, -, -, 1, 2 || A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



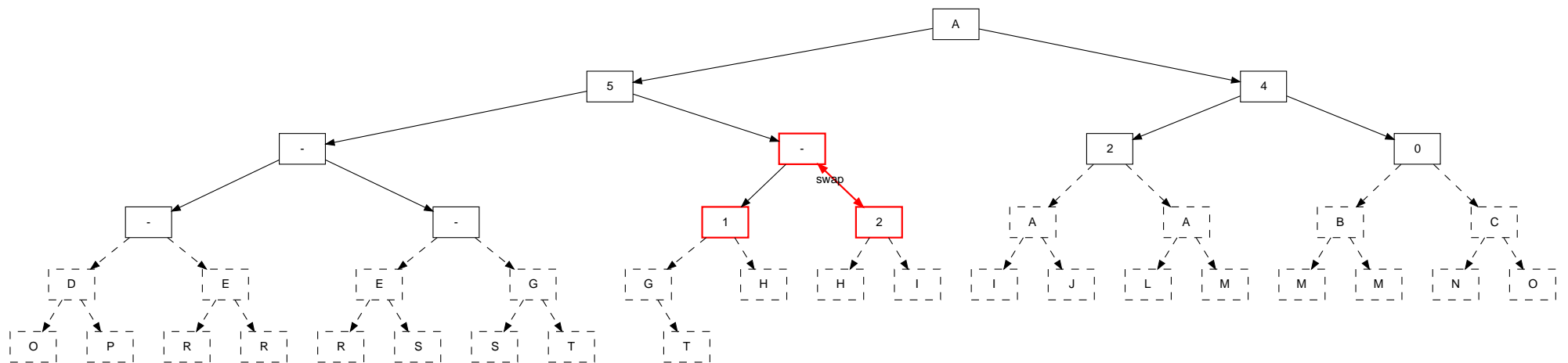
# Step 198: Heapify

[A, -, 4, -, 5, 2, 0, -, -, 1, 2 || A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



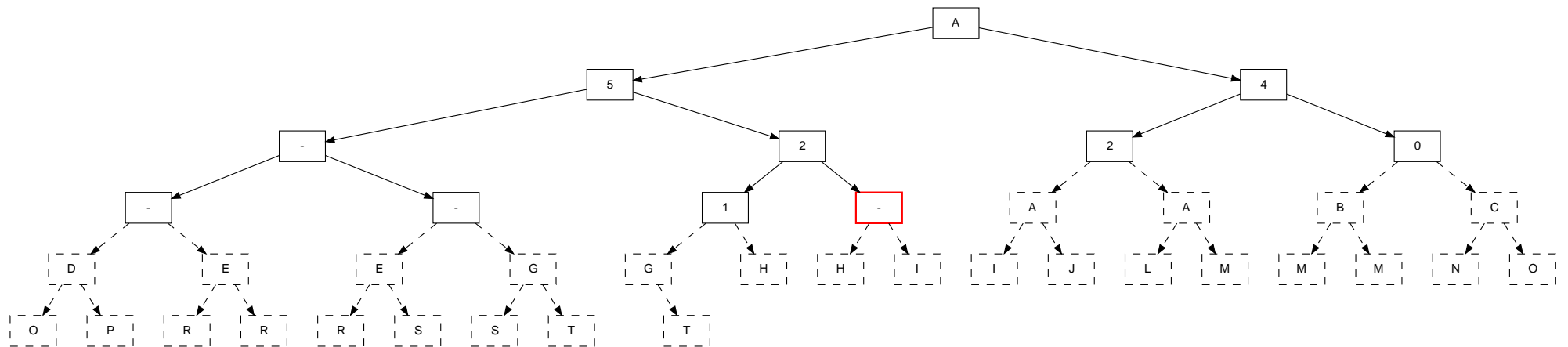
# Step 199: Heapify

[A, 5, 4, -, -, 2, 0, -, -, 1, 2 || A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 200: Heapify

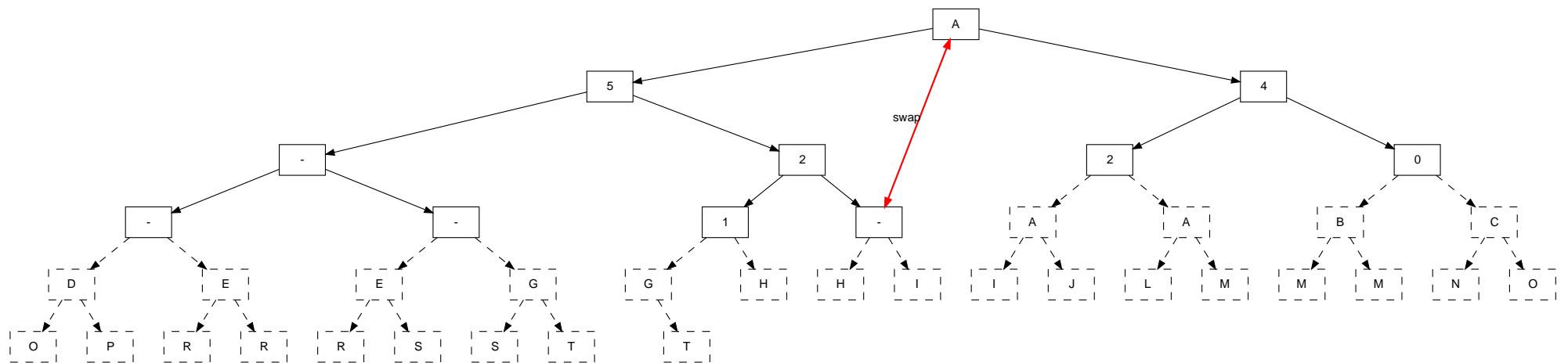
[A, 5, 4, -, 2, 2, 0, -, -, 1, - || A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





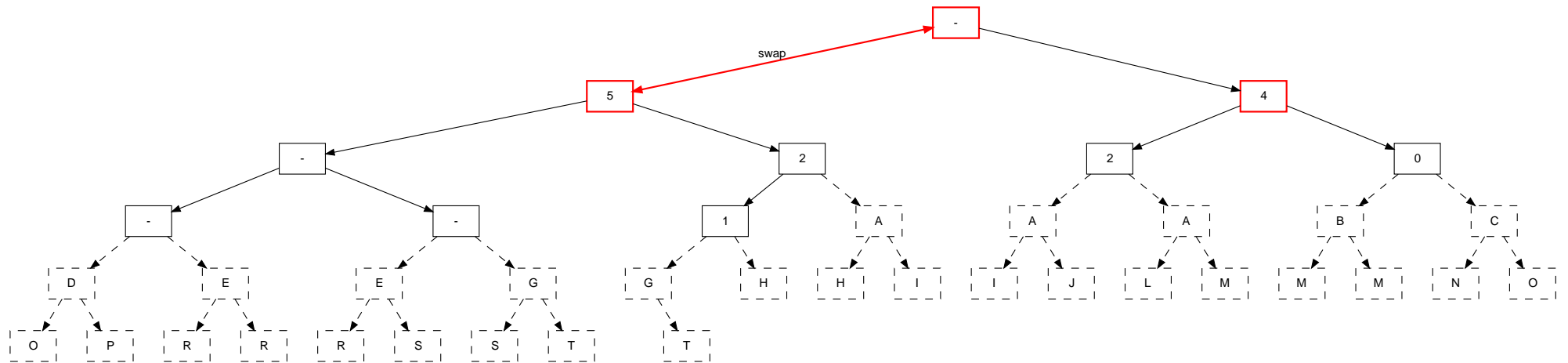
# Step 201: Sort-swap

[A, 5, 4, -, 2, 2, 0, -, -, 1, - || A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



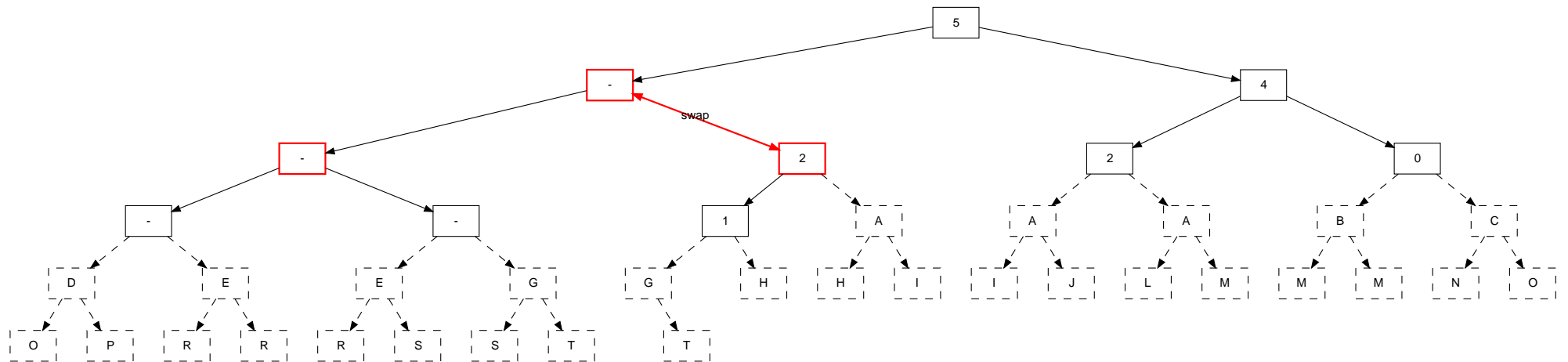
# Step 202: Heapify

[-, 5, 4, -, 2, 2, 0, -, -, 1 || A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



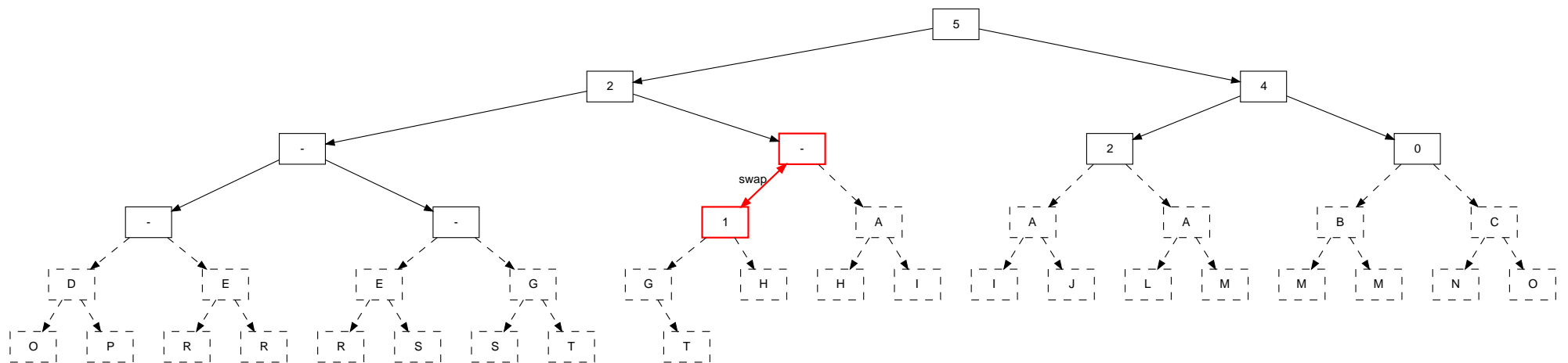
# Step 203: Heapify

[5, -, 4, -, 2, 2, 0, -, -, 1 || A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



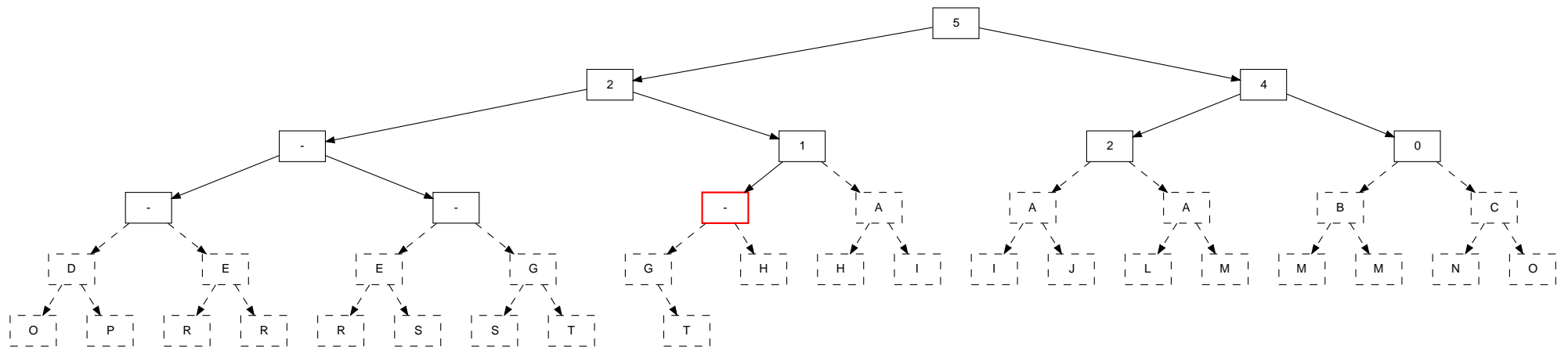
# Step 204: Heapify

[5, 2, 4, -, -, 2, 0, -, -, 1 || A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



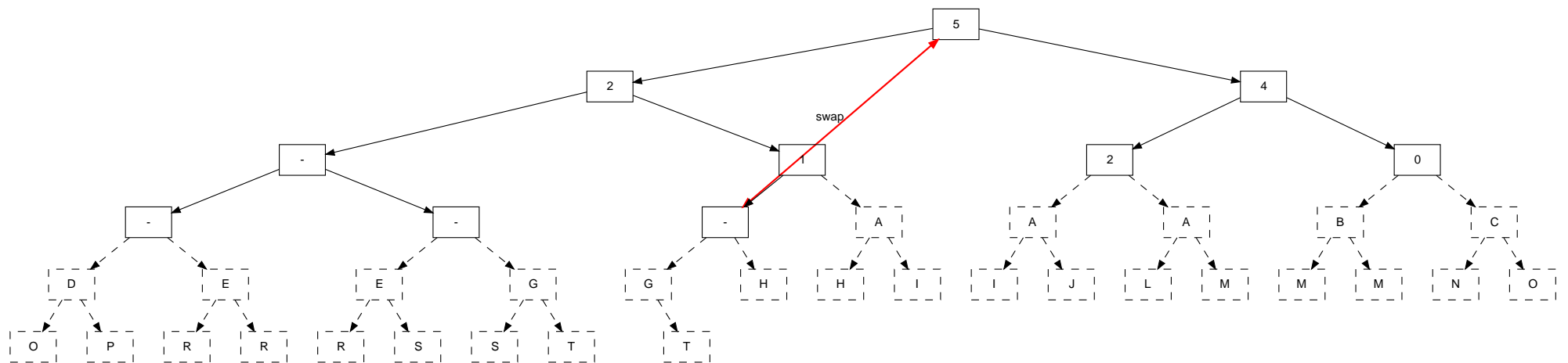
# Step 205: Heapify

[5, 2, 4, -, 1, 2, 0, -, -, - || A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



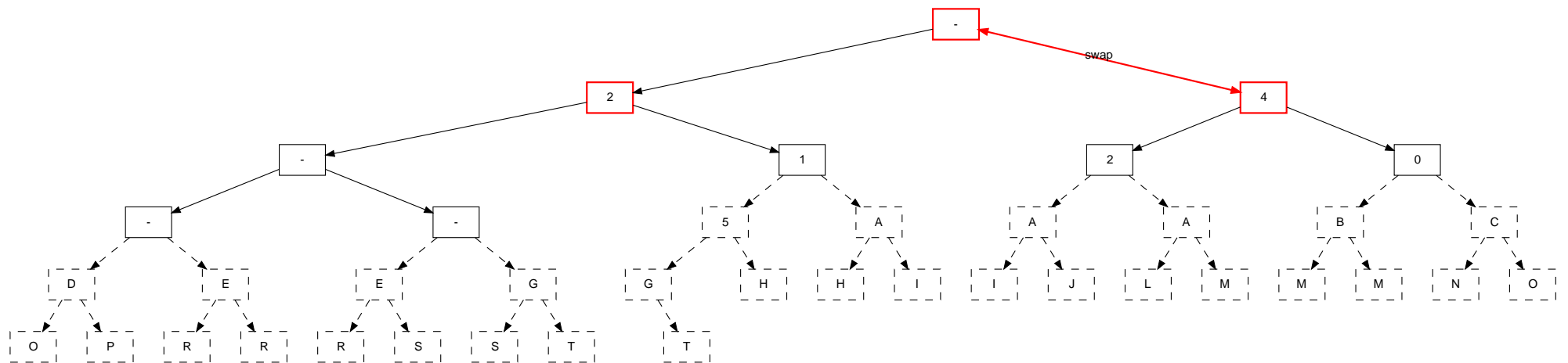
# Step 206: Sort-swap

[5, 2, 4, -, 1, 2, 0, -, -, - || A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



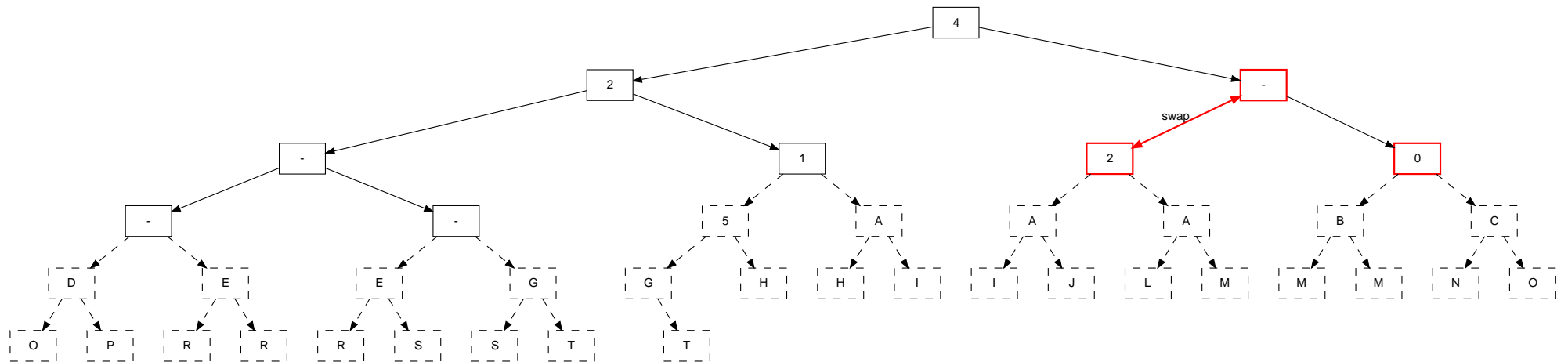
# Step 207: Heapify

[-, 2, 4, -, 1, 2, 0, -, - || 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 208: Heapify

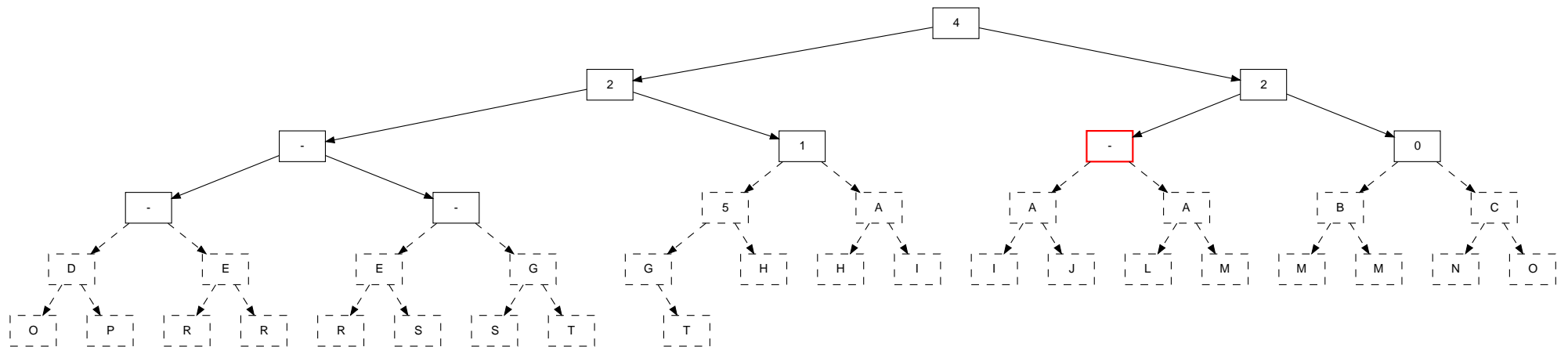
[4, 2, -, -, 1, 2, 0, -, - || 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





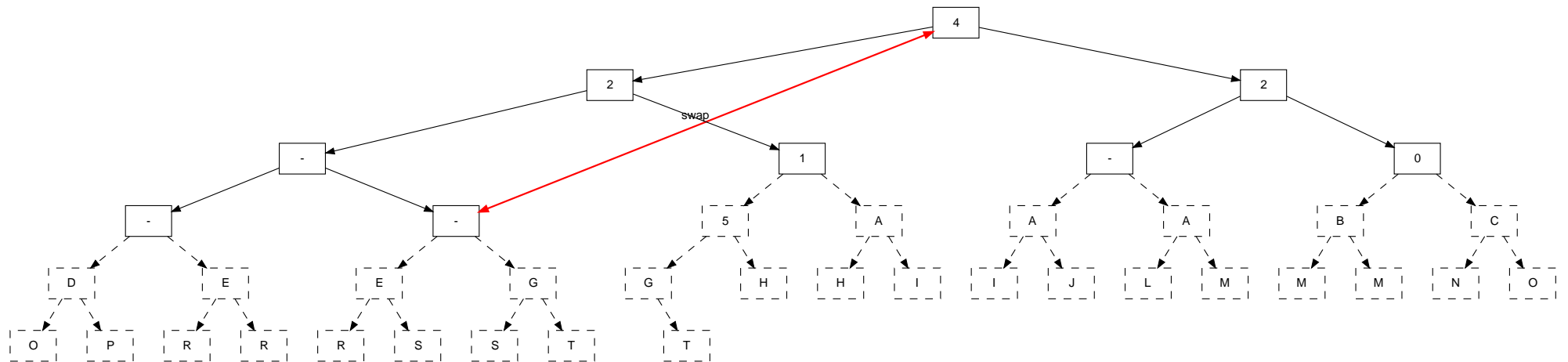
# Step 209: Heapify

[4, 2, 2, -, 1, -, 0, -, - || 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T,  
T]



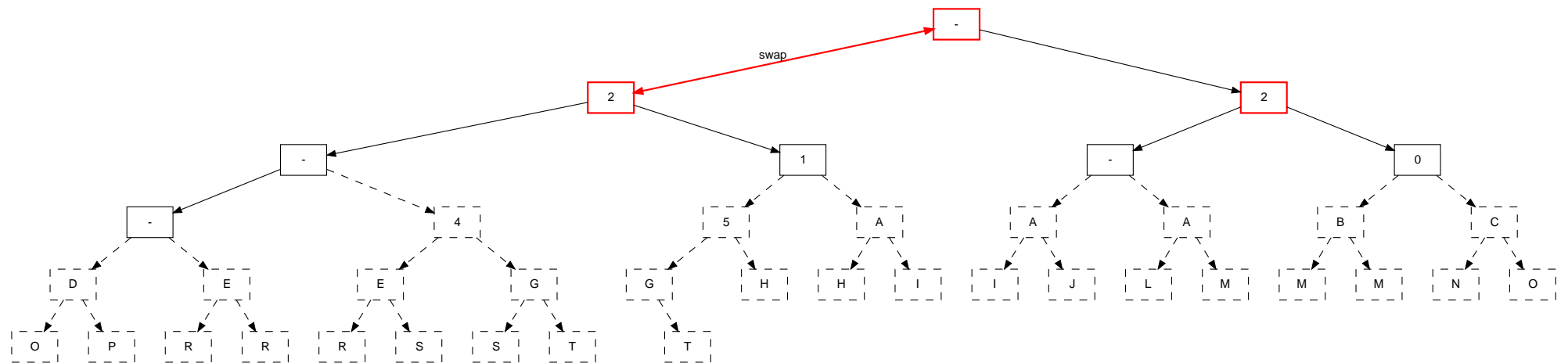
# Step 210: Sort-swap

[4, 2, 2, -, 1, -, 0, -, - || 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



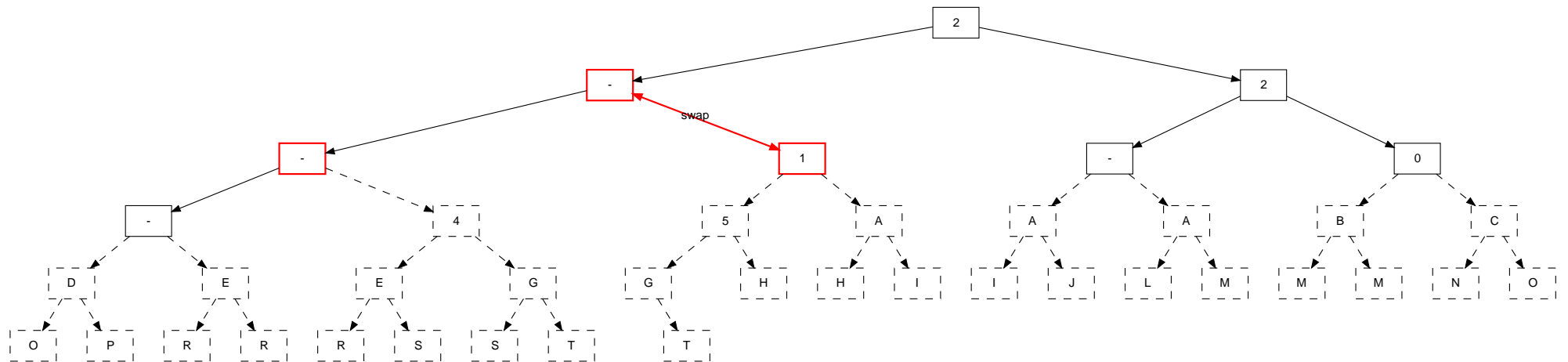
# Step 211: Heapify

[-, 2, 2, -, 1, -, 0, - || 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



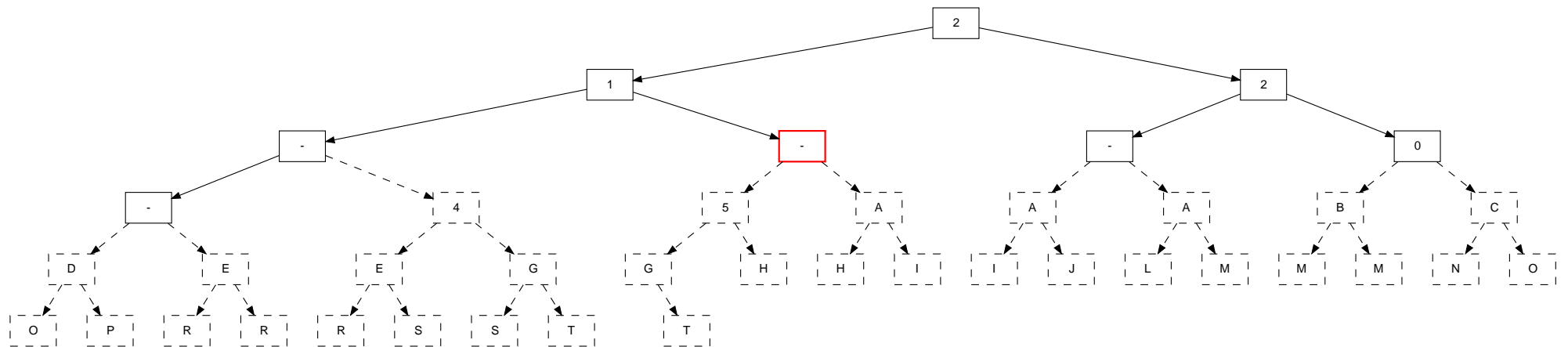
# Step 212: Heapify

[2, -, 2, -, 1, -, 0, - || 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



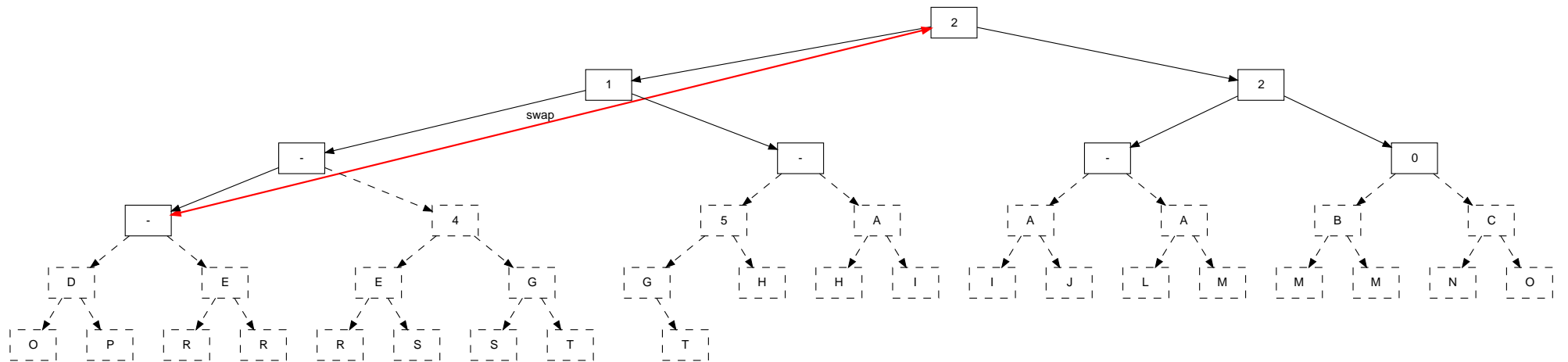
# Step 213: Heapify

[2, 1, 2, -, -, -, 0, - || 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



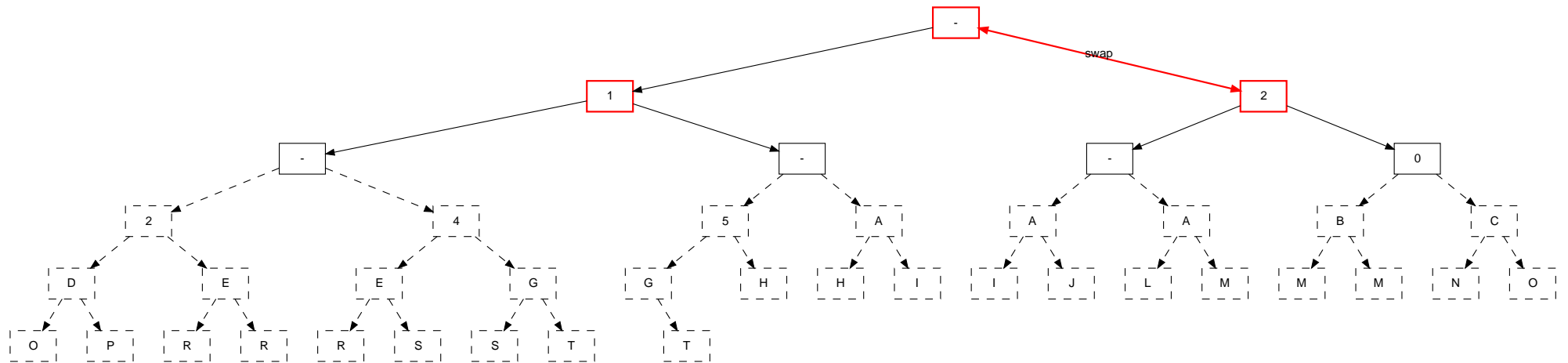
# Step 214: Sort-swap

[2, 1, 2, -, -, -, 0, - || 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



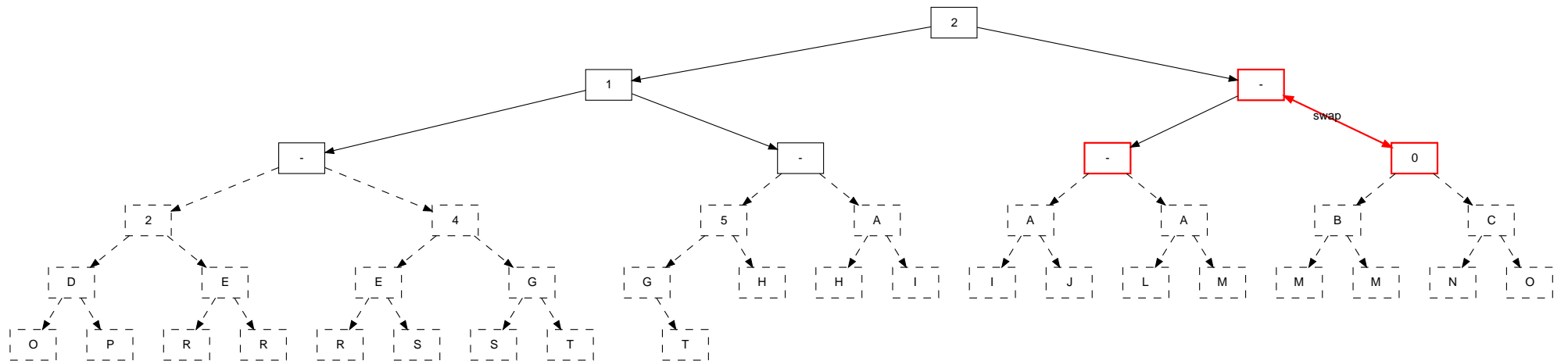
# Step 215: Heapify

[-, 1, 2, -, -, -, 0 || 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 216: Heapify

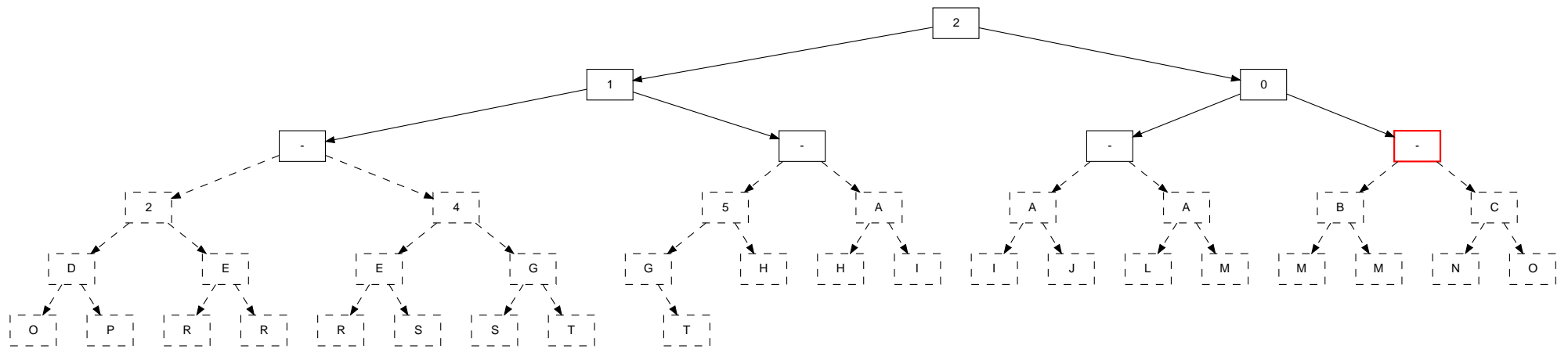
[2, 1, -, -, -, -, 0 || 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T,  
T]





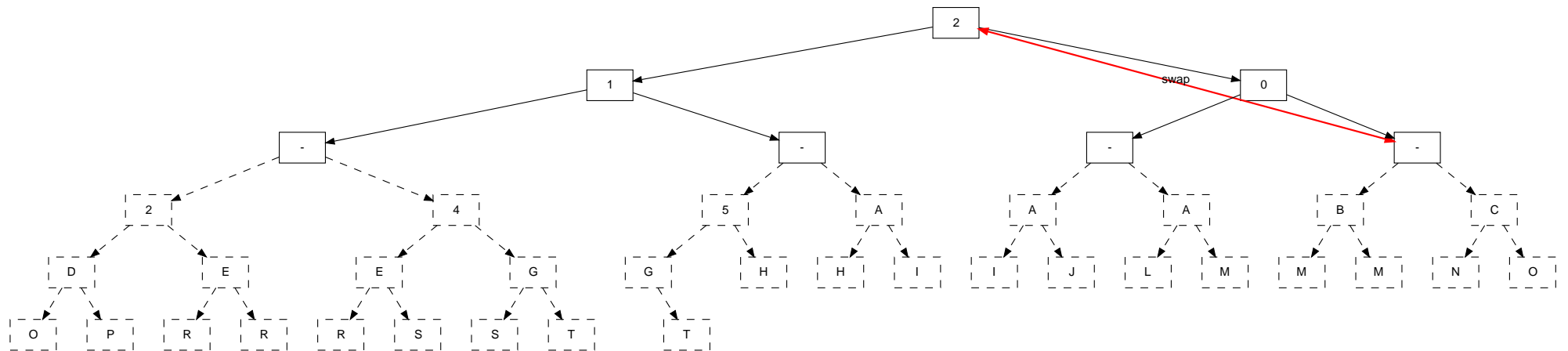
# Step 217: Heapify

[2, 1, 0, -, -, -, - || 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



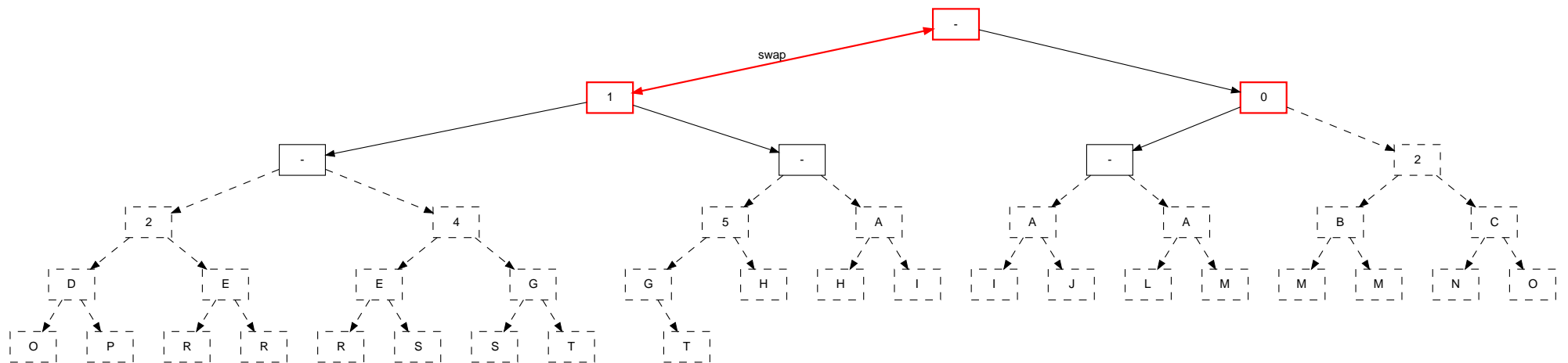
# Step 218: Sort-swap

[2, 1, 0, -, -, -, - || 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T,  
T]



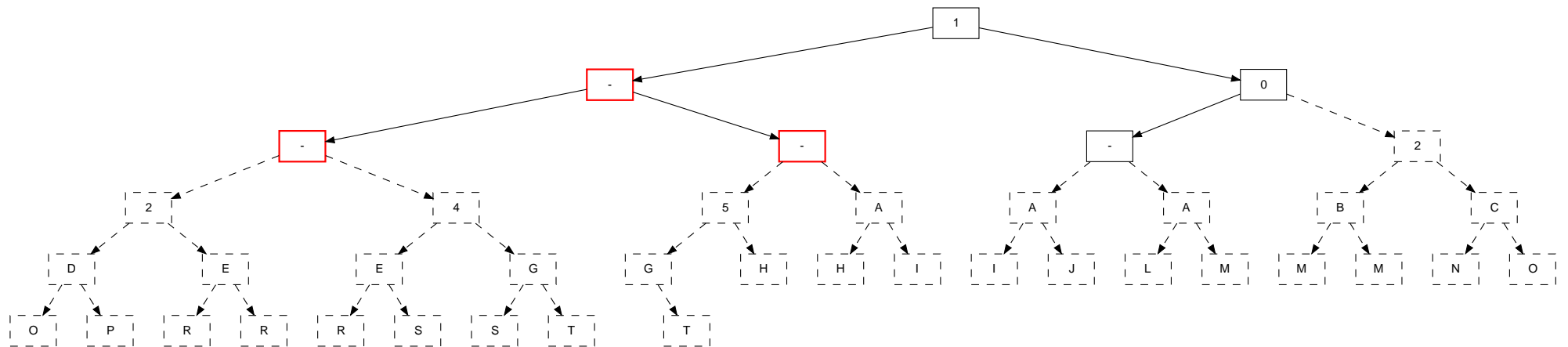
# Step 219: Heapify

[-, 1, 0, -, -, - || 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



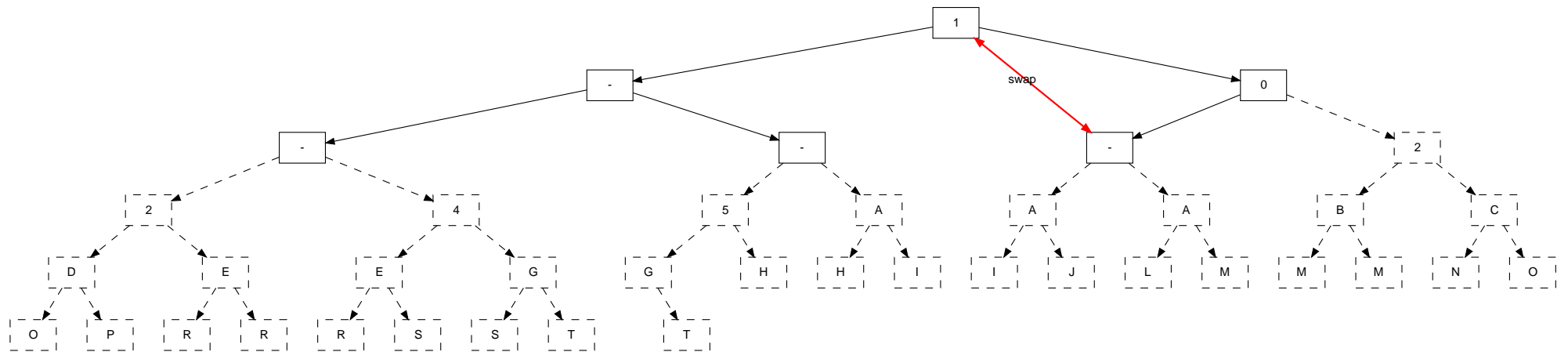
# Step 220: Heapify

[1, -, 0, -, -, - || 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



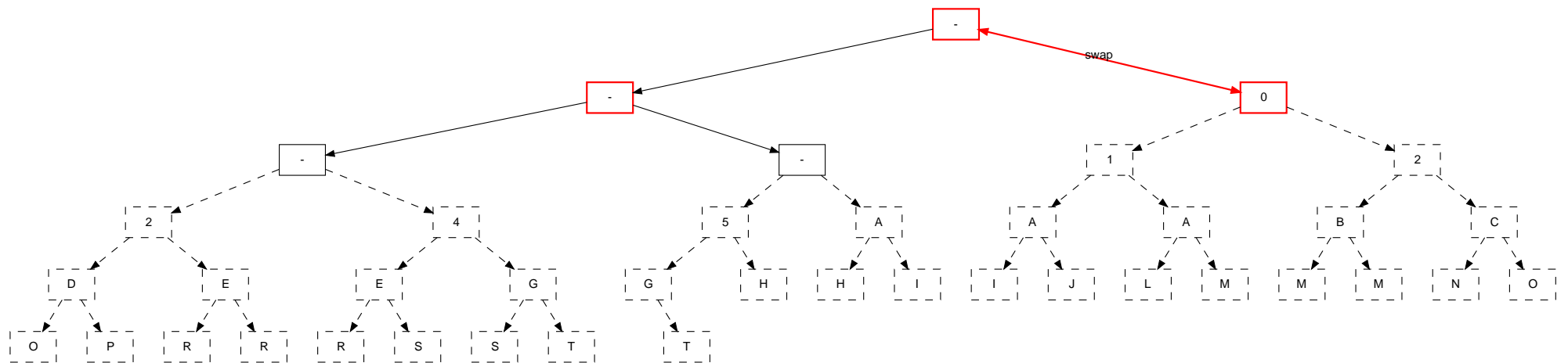
# Step 221: Sort-swap

[1, -, 0, -, -, - || 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 222: Heapify

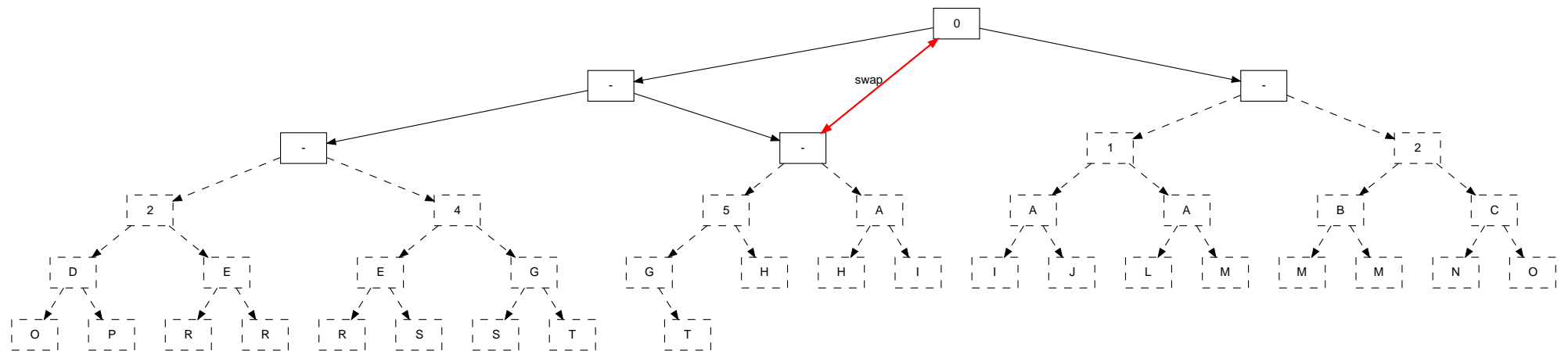
[-, -, 0, -, - || 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





# Step 224: Sort-swap

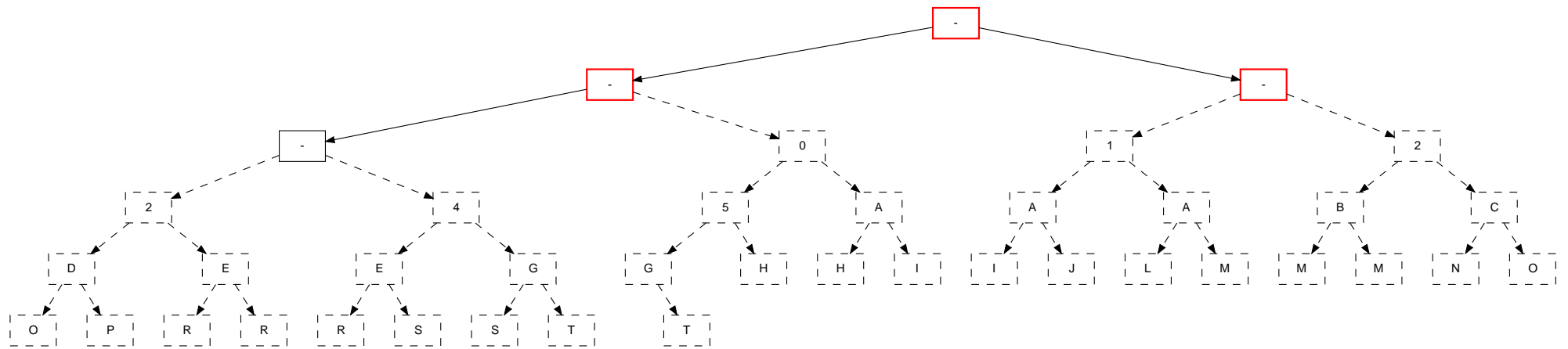
[0, -, -, -, - || 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]





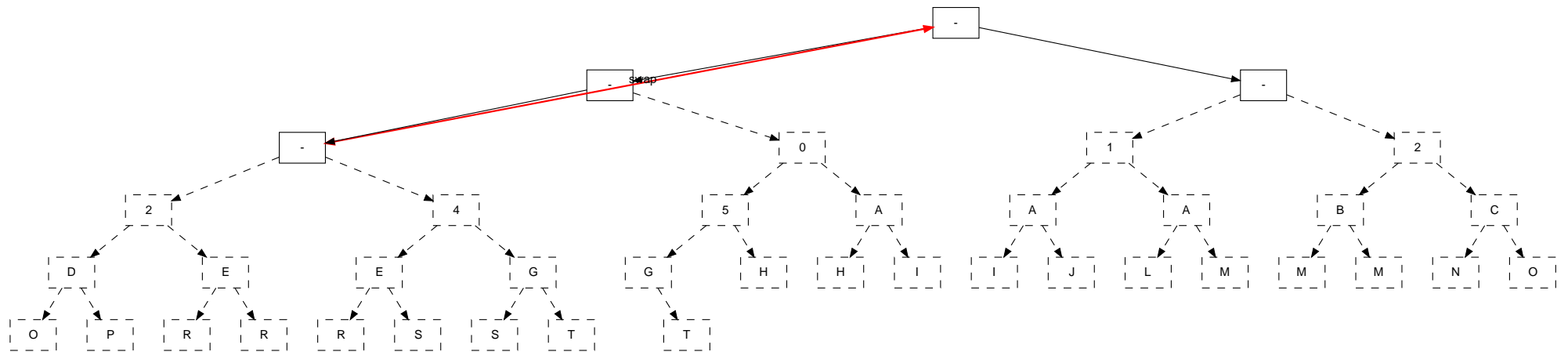
# Step 225: Heapify

[-, -, -, - || 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



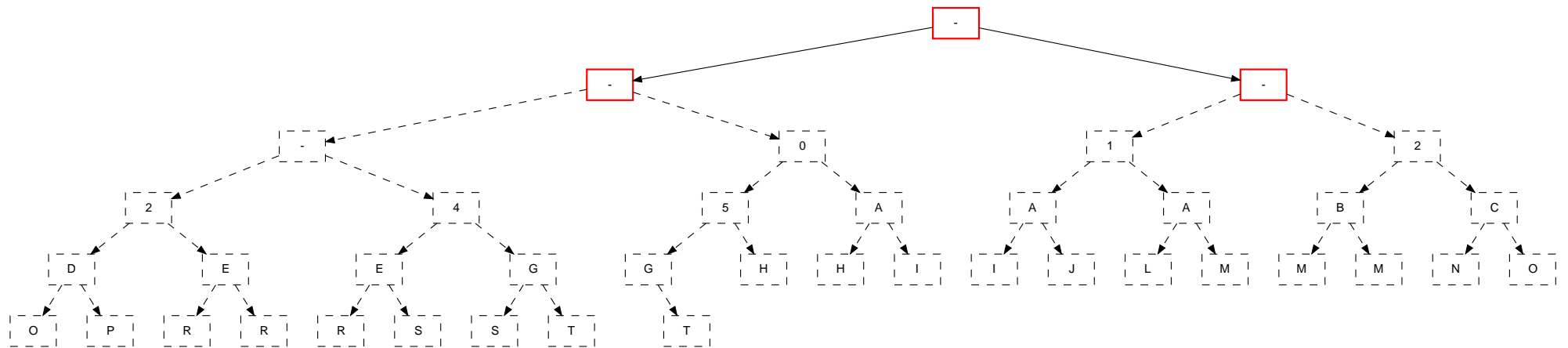
# Step 226: Sort-swap

[-, -, -, - || 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



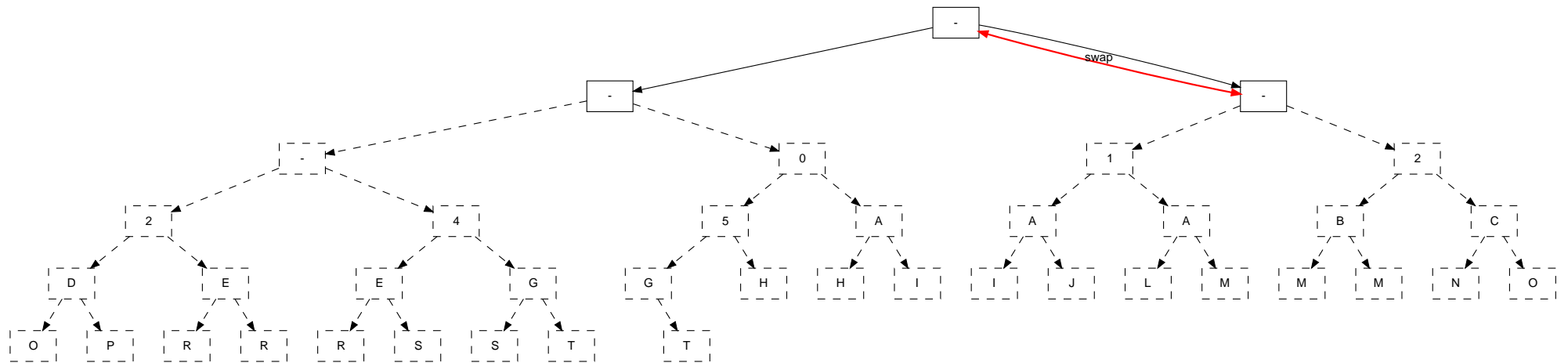
# Step 227: Heapify

[-, -, - || -, 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



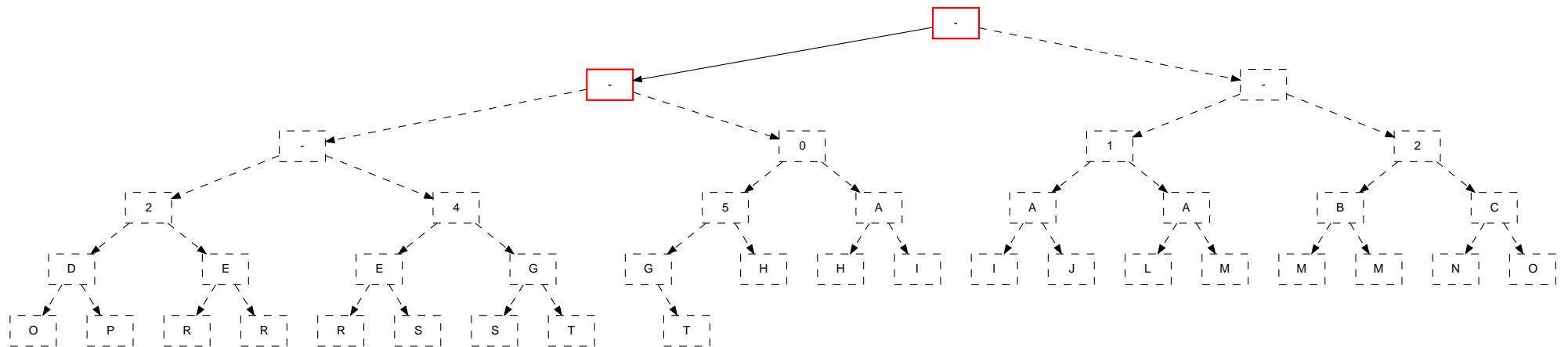
# Step 228: Sort-swap

[-, -, - || -, 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



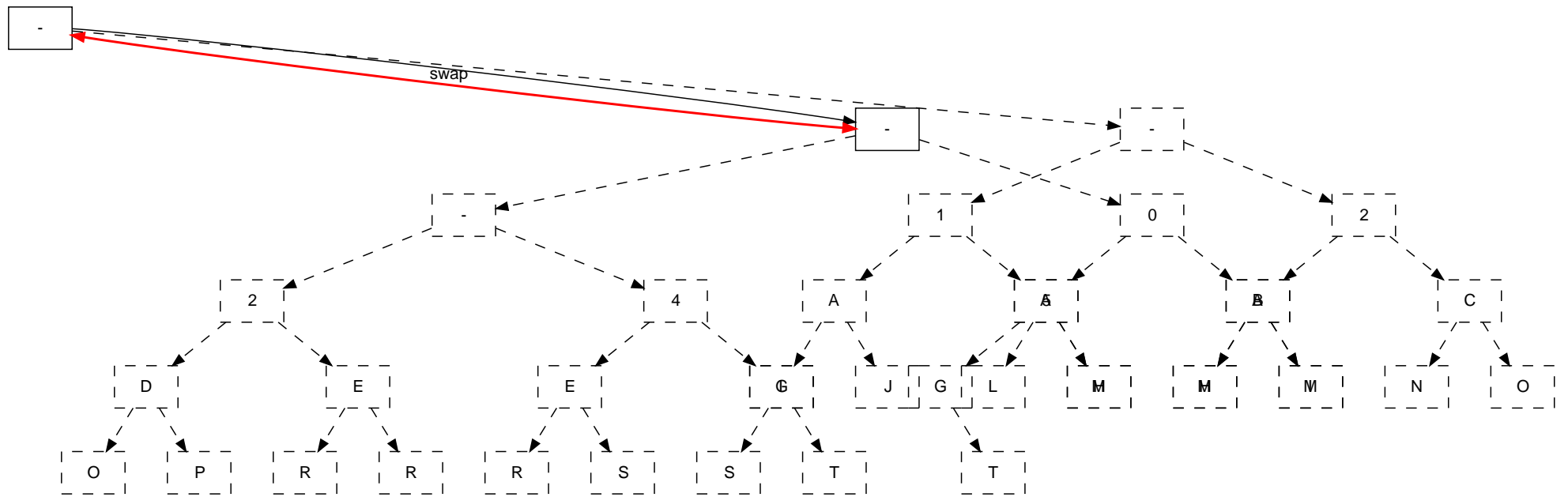
# Step 229: Heapify

[-, - || -, -, 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



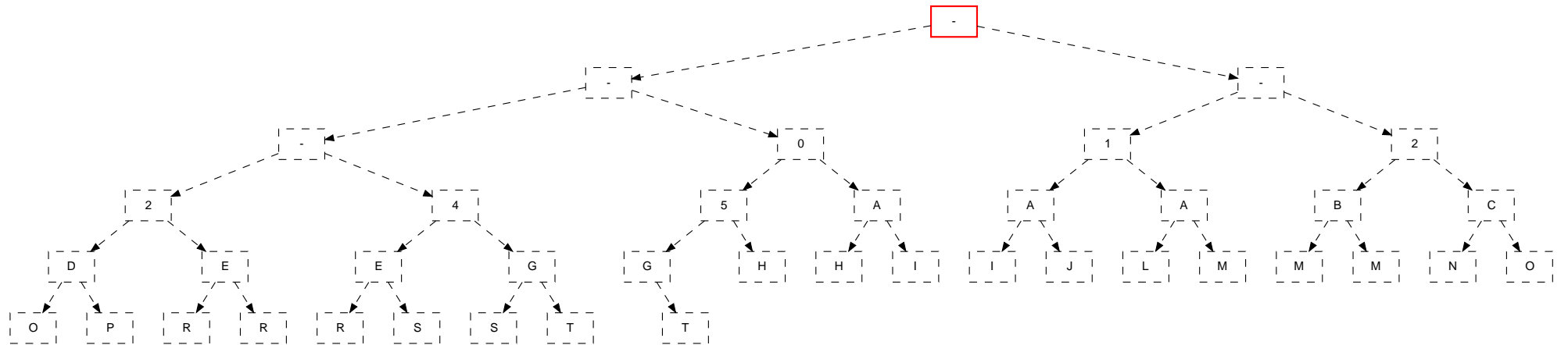
# Step 230: Sort-swap

[-, -] | -, -, 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



# Step 231: Heapify

[- || -, -, -, 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]



Step 232: Done!

[-, -, -, -, 0, 1, 2, 2, 4, 5, A, A, A, B, C, D, E, E, G, G, H, H, I, I, J, L, M, M, M, N, O, O, P, R, R, R, S, S, T, T]

