

Before executing  
`fh_0001.insert(12)`



12

After executing  
`fh_0001.insert(12)`

Before executing  
fh\_0001.insert(13)



12

12

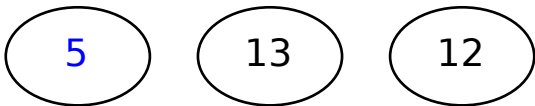
13

After executing  
`fh_0001.insert(13)`

Before executing  
fh\_0001.insert(5)

12

13



After executing  
`fh_0001.insert(5)`

Before executing  
fh\_0001.insert(6)

5

13

12

5

6

13

12

After executing  
`fh_0001.insert(6)`



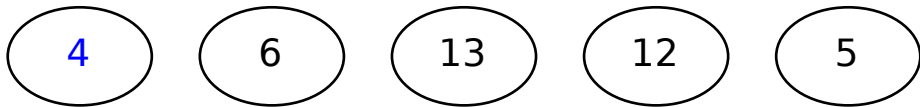
Before executing  
fh\_0001.insert(4)

5

6

13

12



After executing  
`fh_0001.insert(4)`

Before executing  
fh\_0001.extractMin()

4

6

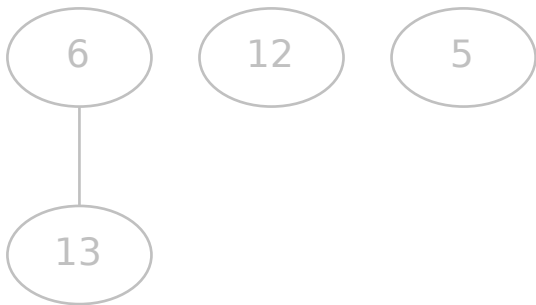
13

12

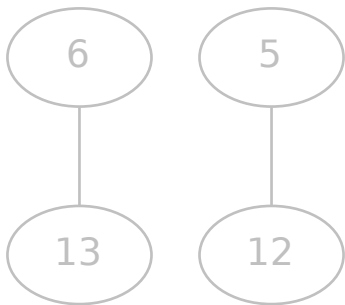
5



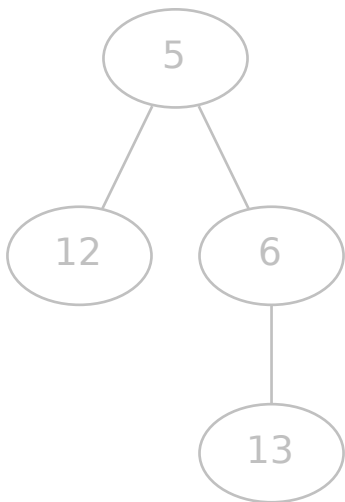
Within the invocation of  
`fh_0001.extractMin()` → 4  
Status: removed min node 4



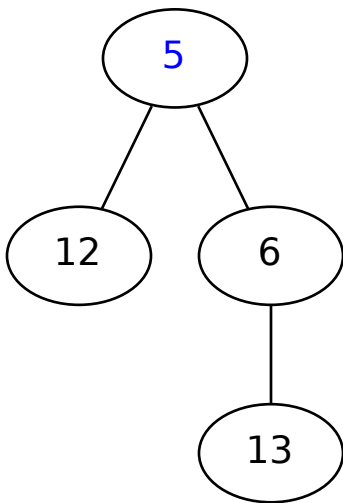
Within the invocation of  
`fh_0001.extractMin()` → 4  
Status: did linking step for degree 0



Within the invocation of  
`fh_0001.extractMin()` → 4  
Status: did linking step for degree 0



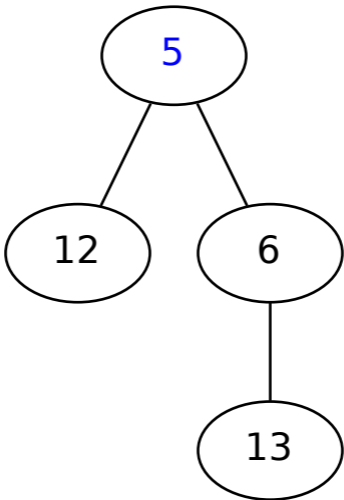
Within the invocation of  
fh\_0001.extractMin() → 4  
Status: did linking step for degree 1

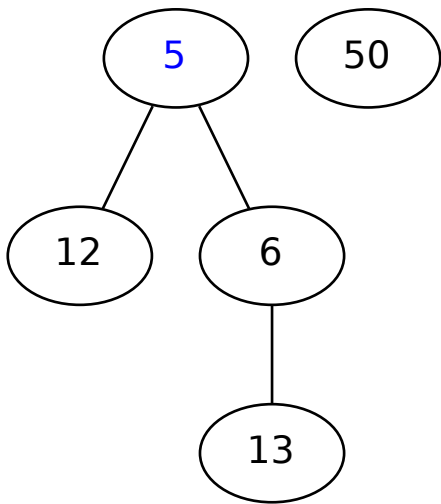


After executing  
`fh_0001.extractMin()` → 4



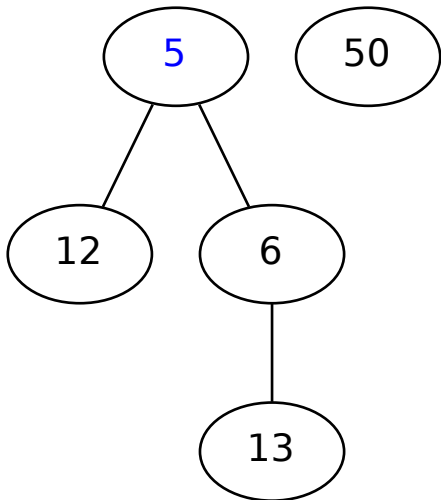
Before executing  
`fh_0001.insert(50)`

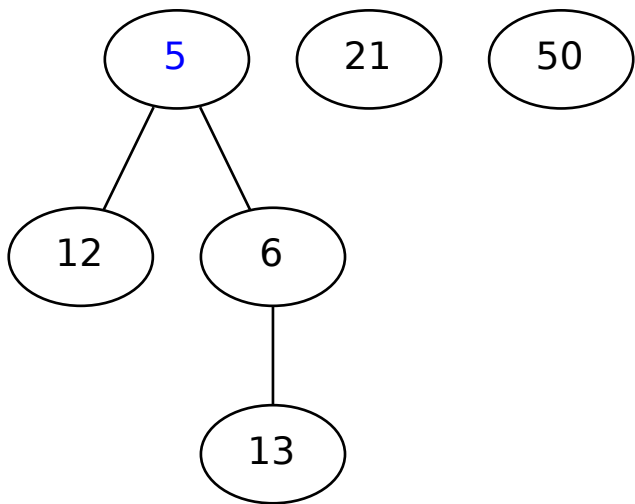




After executing  
`fh_0001.insert(50)`

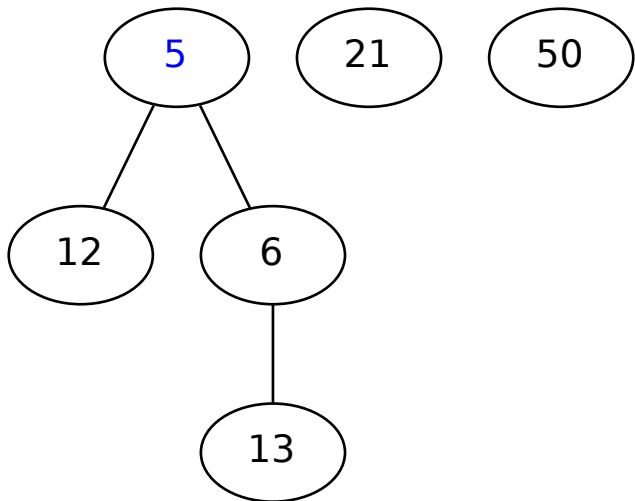
Before executing  
fh\_0001.insert(21)

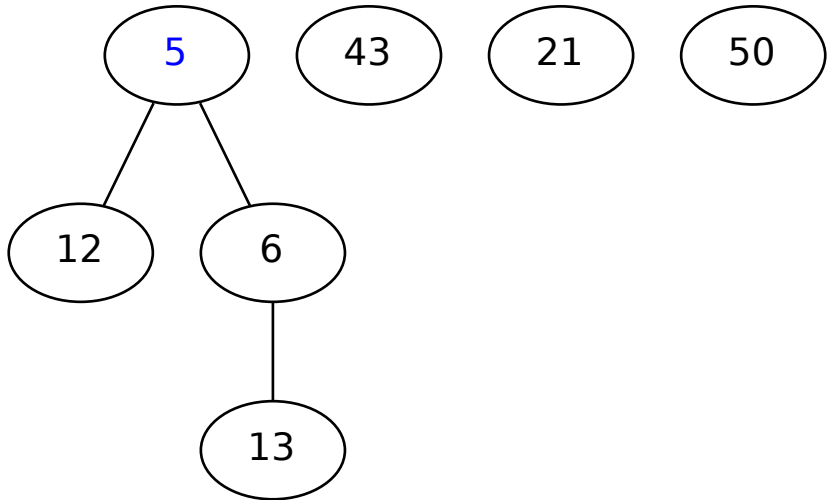




After executing  
`fh_0001.insert(21)`

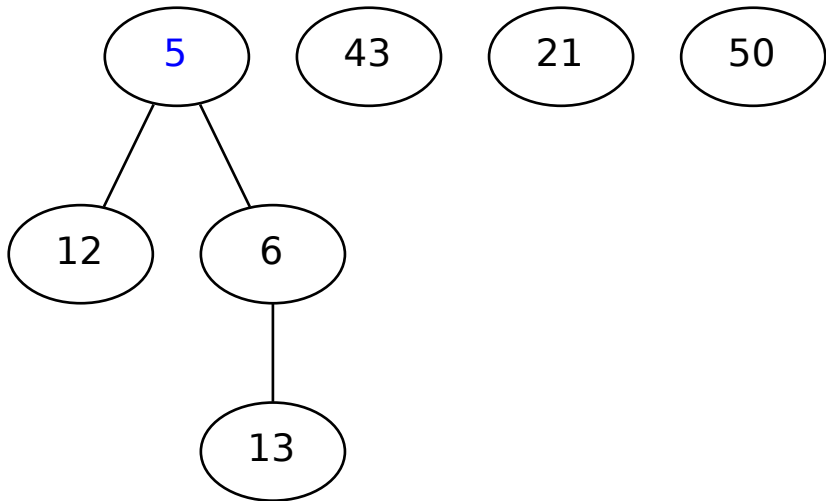
Before executing  
fh\_0001.insert(43)

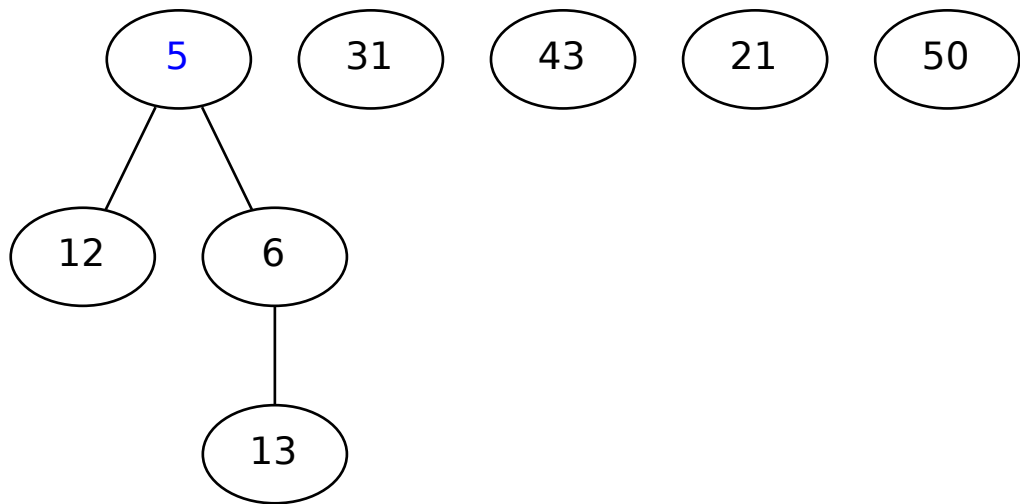




After executing  
`fh_0001.insert(43)`

Before executing  
fh\_0001.insert(31)

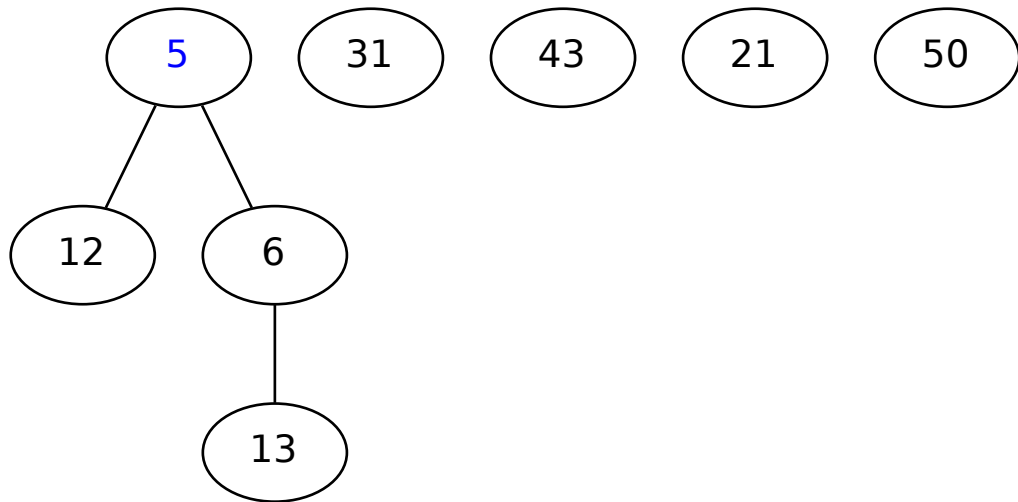


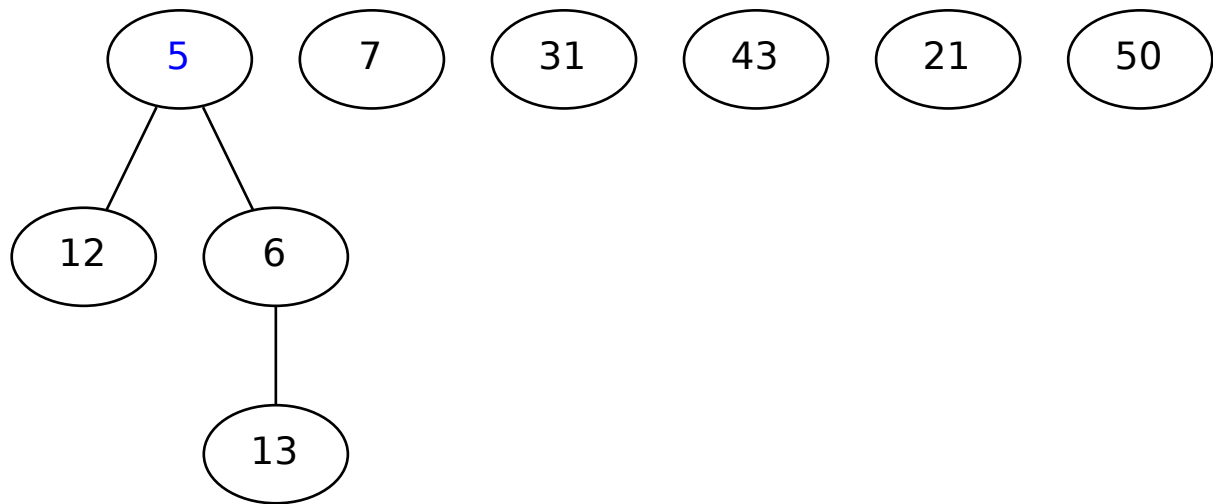


After executing  
`fh_0001.insert(31)`



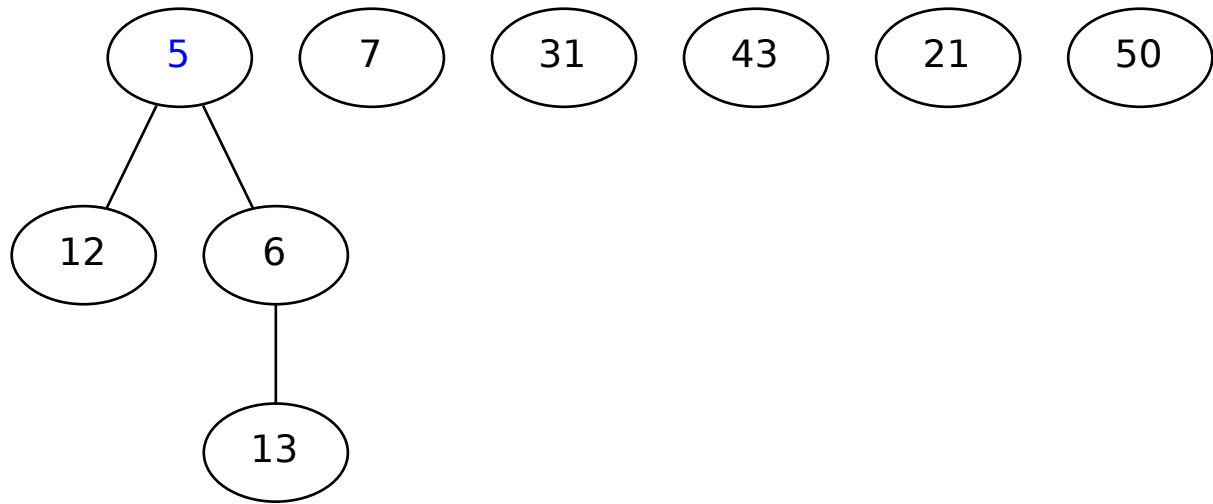
Before executing  
fh\_0001.insert(7)

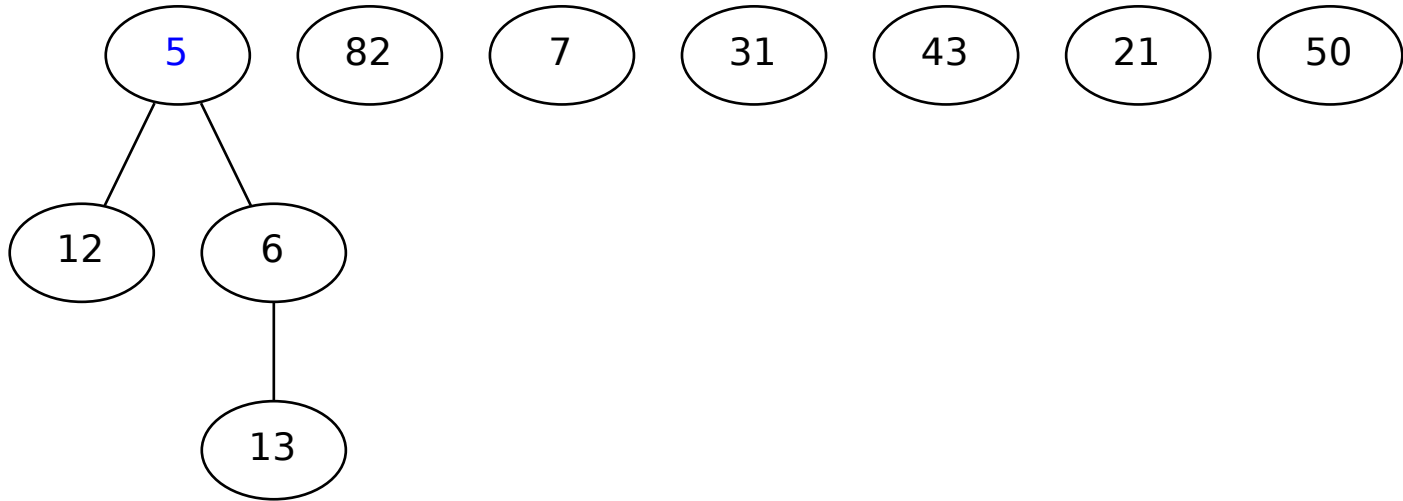




After executing  
`fh_0001.insert(7)`

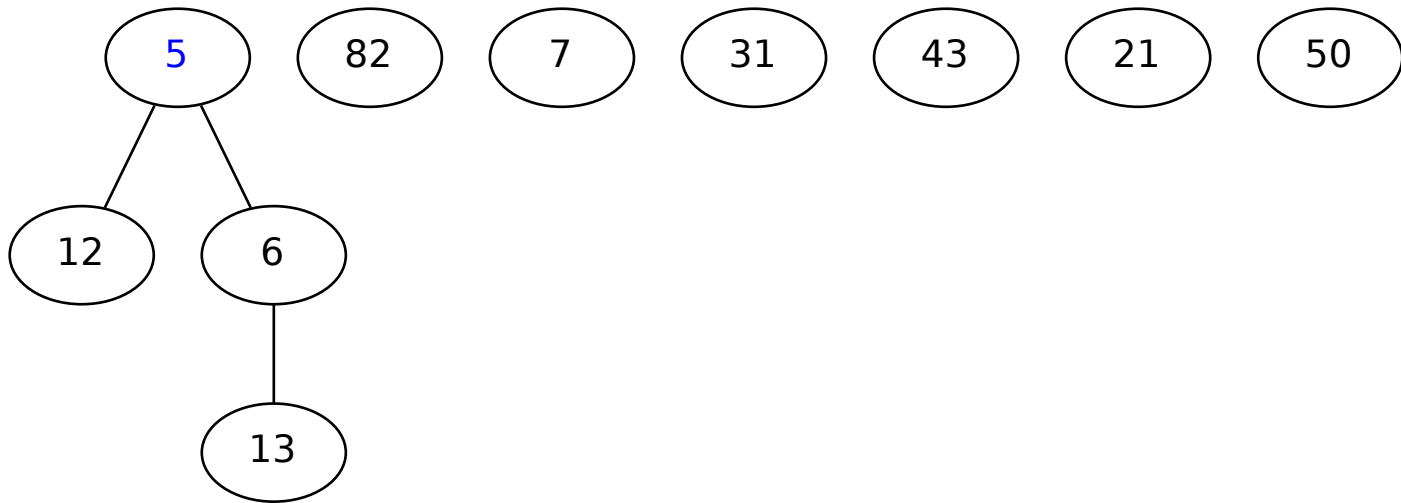
Before executing  
fh\_0001.insert(82)

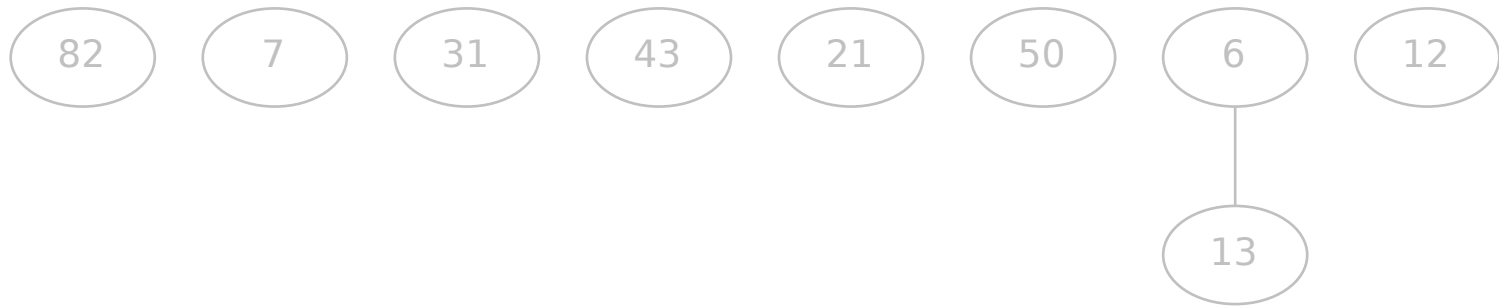




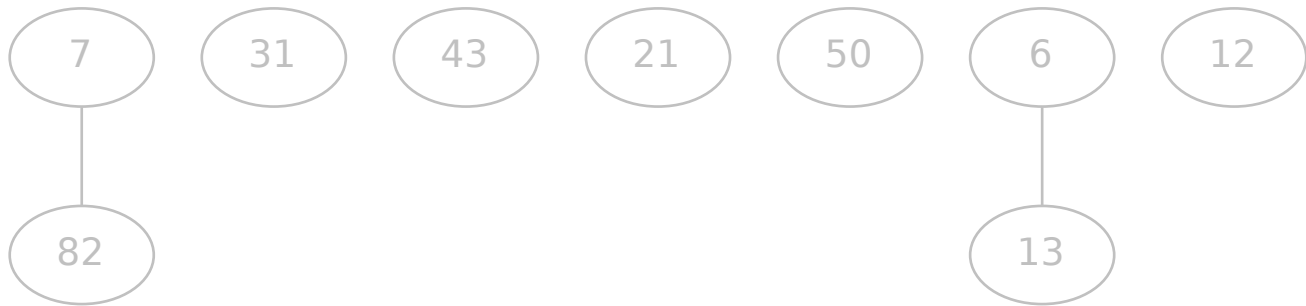
After executing  
`fh_0001.insert(82)`

Before executing  
fh\_0001.extractMin()

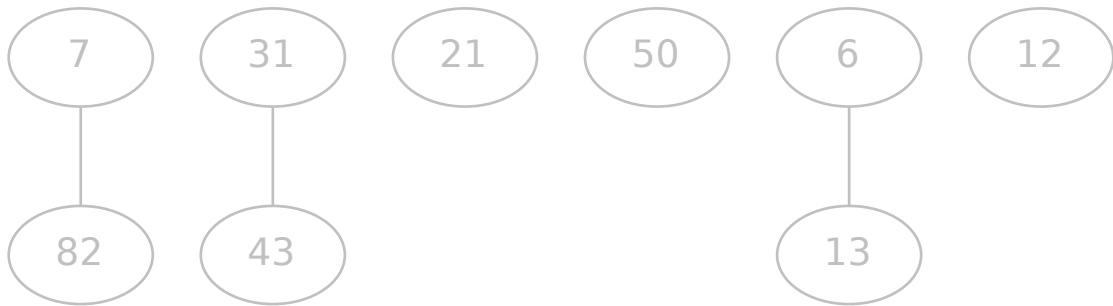




Within the invocation of  
fh\_0001.extractMin() → 5  
Status: removed min node 5

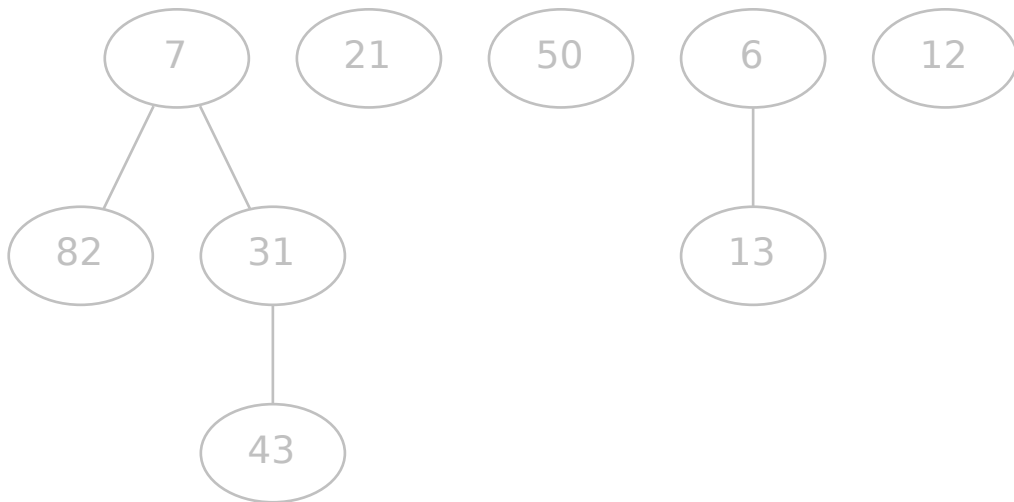


Within the invocation of  
fh\_0001.extractMin() → 5  
Status: did linking step for degree 0

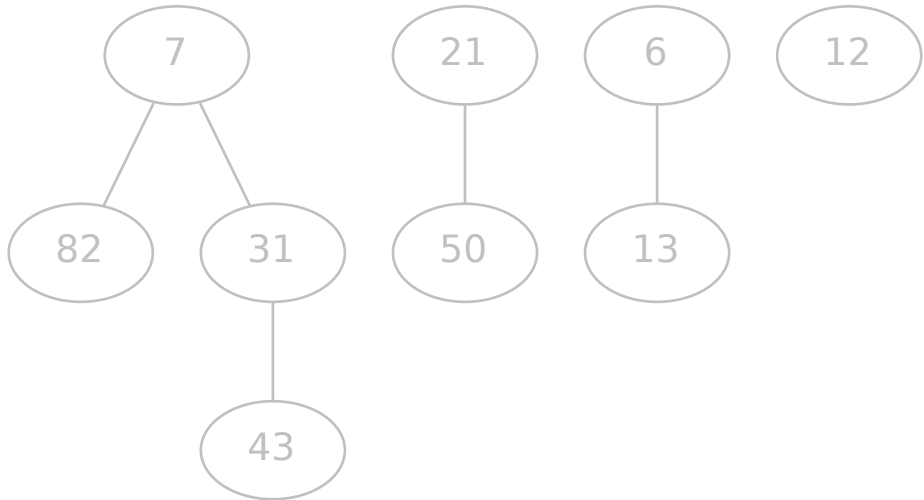


Within the invocation of  
fh\_0001.extractMin() → 5  
Status: did linking step for degree 0

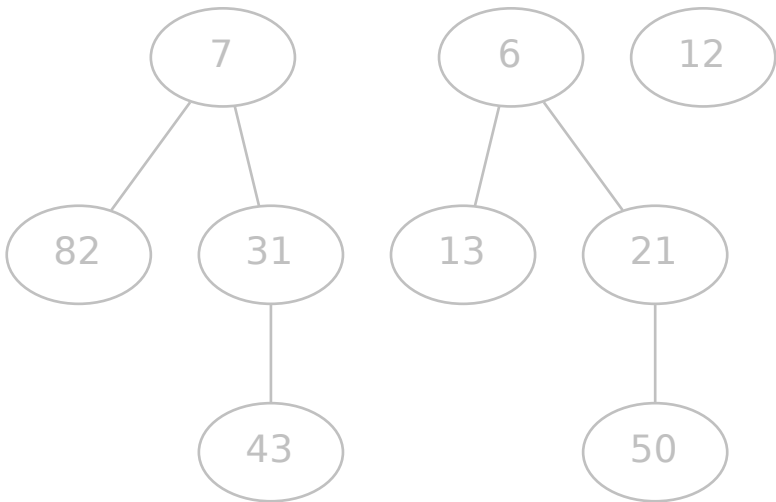




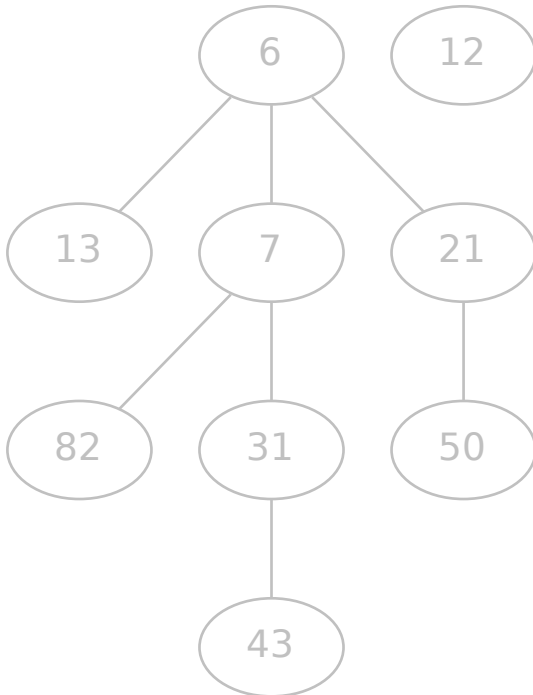
Within the invocation of  
fh\_0001.extractMin() → 5  
Status: did linking step for degree 1



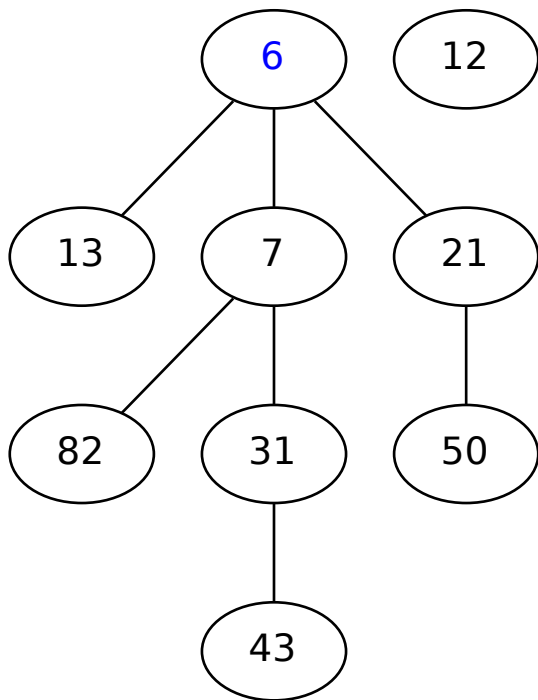
Within the invocation of  
fh\_0001.extractMin() → 5  
Status: did linking step for degree 0



Within the invocation of  
`fh_0001.extractMin()` → 5  
Status: did linking step for degree 1

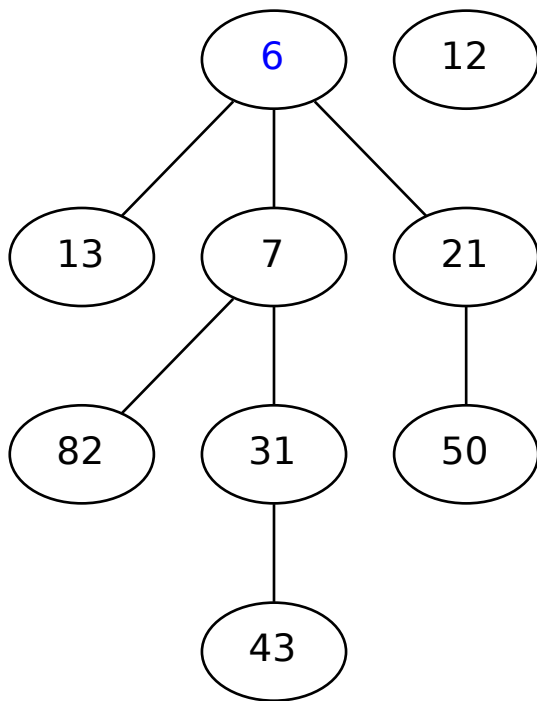


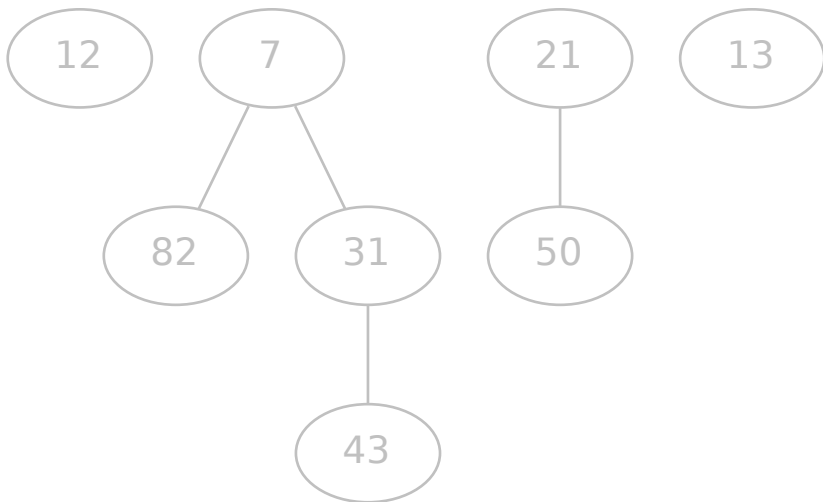
Within the invocation of  
fh\_0001.extractMin() → 5  
Status: did linking step for degree 2



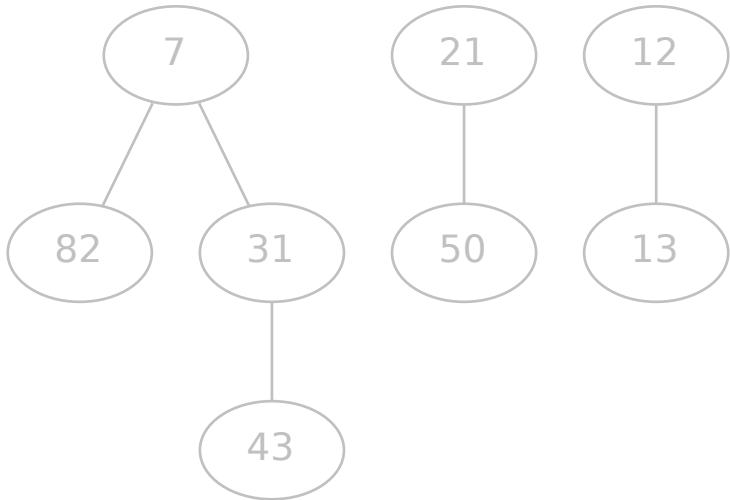
After executing  
fh\_0001.extractMin() → 5

Before executing  
fh\_0001.extractMin()



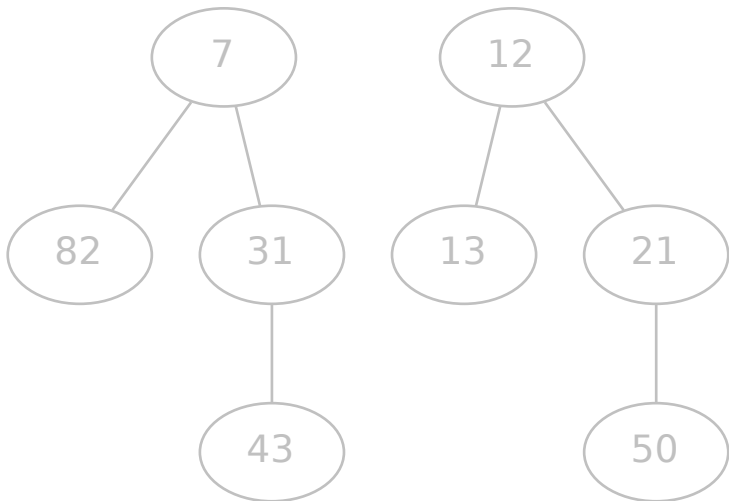


Within the invocation of  
fh\_0001.extractMin() → 6  
Status: removed min node 6

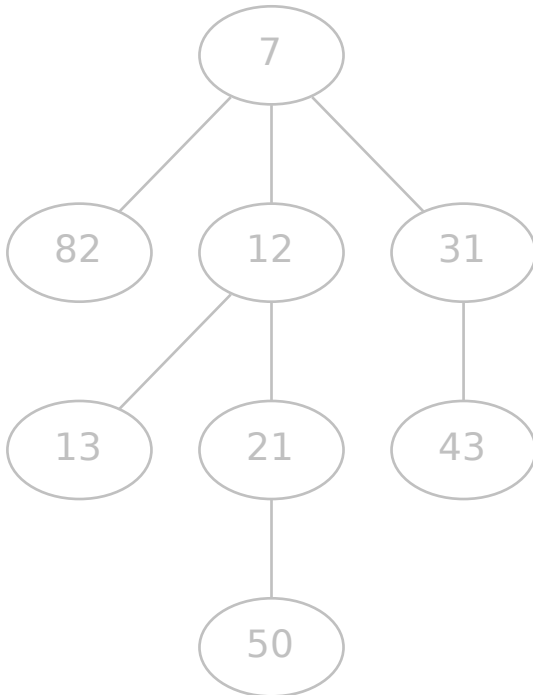


Within the invocation of  
`fh_0001.extractMin()` → 6  
Status: did linking step for degree 0

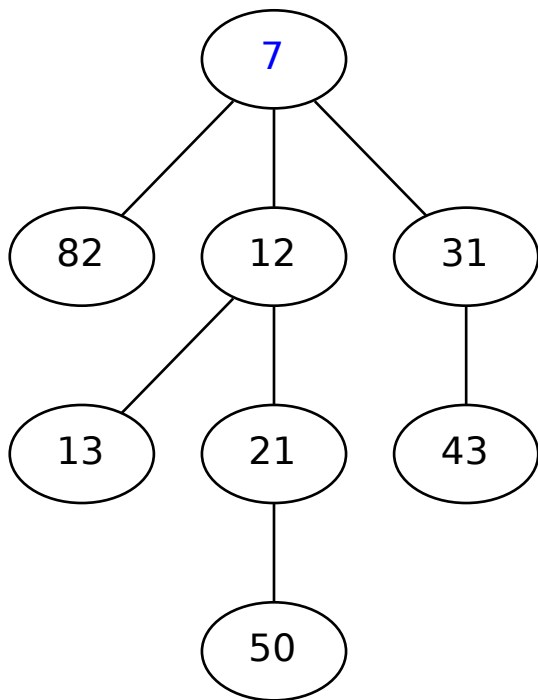




Within the invocation of  
`fh_0001.extractMin()` → 6  
Status: did linking step for degree 1

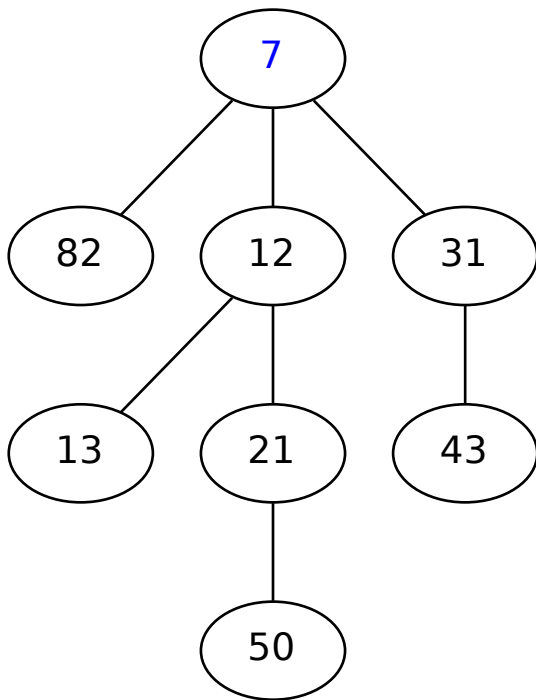


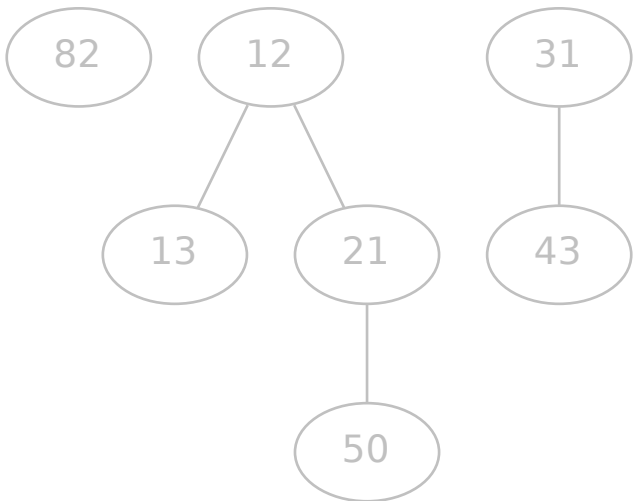
Within the invocation of  
`fh_0001.extractMin()` → 6  
Status: did linking step for degree 2



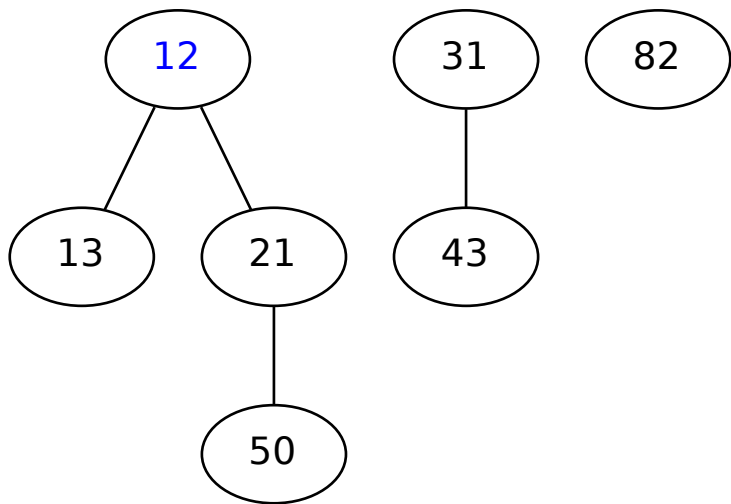
After executing  
fh\_0001.extractMin() → 6

Before executing  
fh\_0001.extractMin()



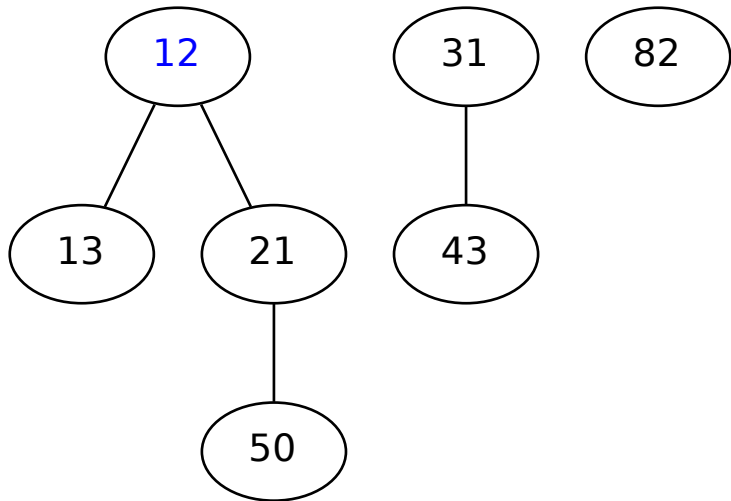


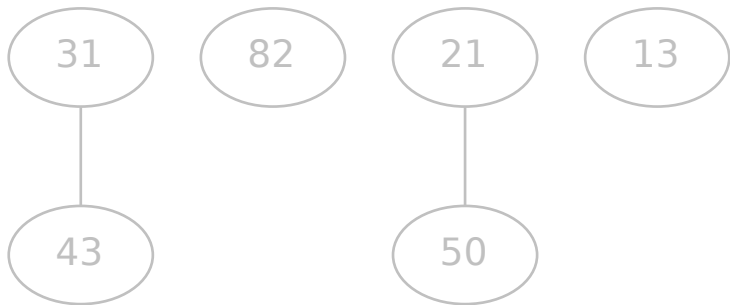
Within the invocation of  
`fh_0001.extractMin()` → 7  
Status: removed min node 7



After executing  
`fh_0001.extractMin()` → 7

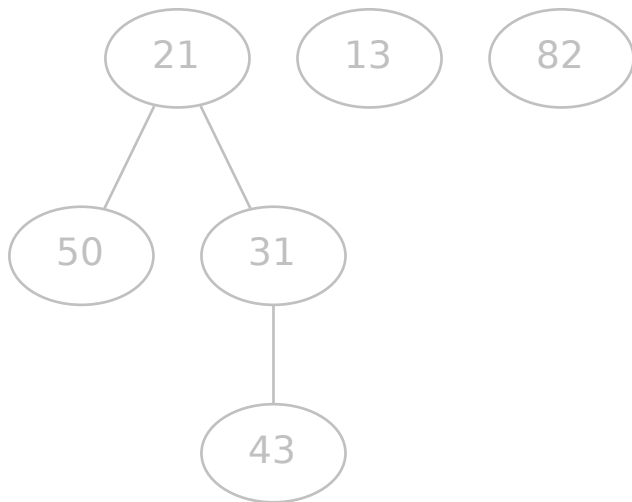
Before executing  
fh\_0001.extractMin()



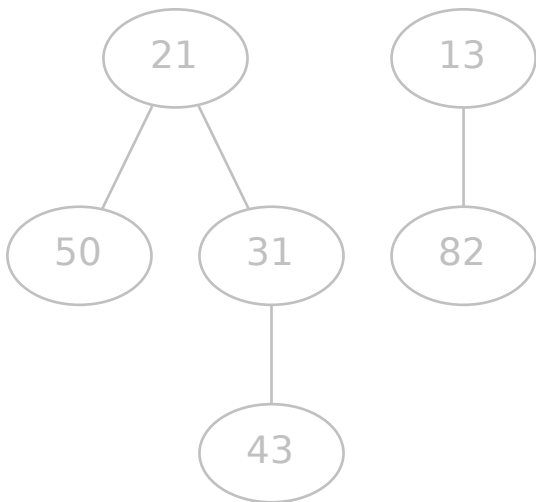


Within the invocation of  
fh\_0001.extractMin() → 12  
Status: removed min node 12

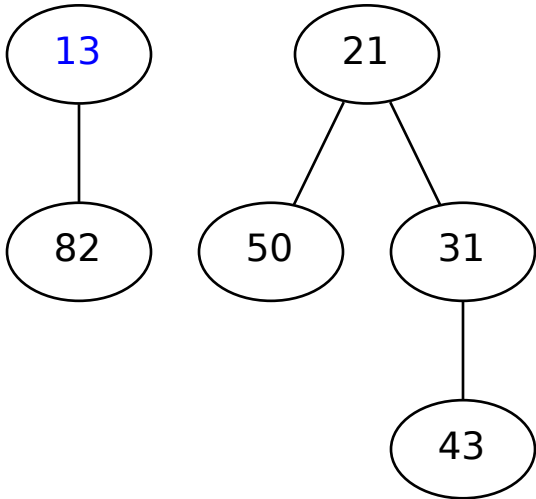




Within the invocation of  
`fh_0001.extractMin()` → 12  
Status: did linking step for degree 1

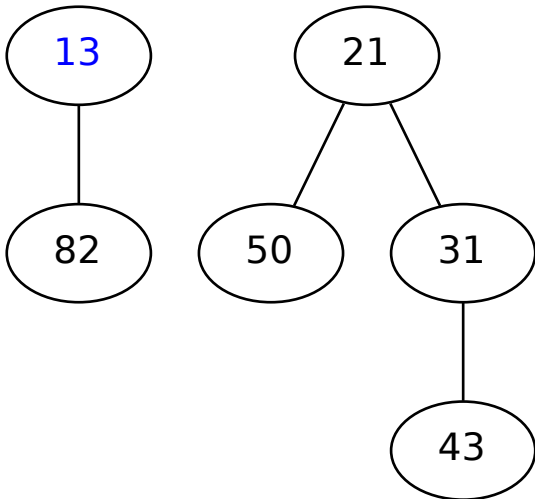


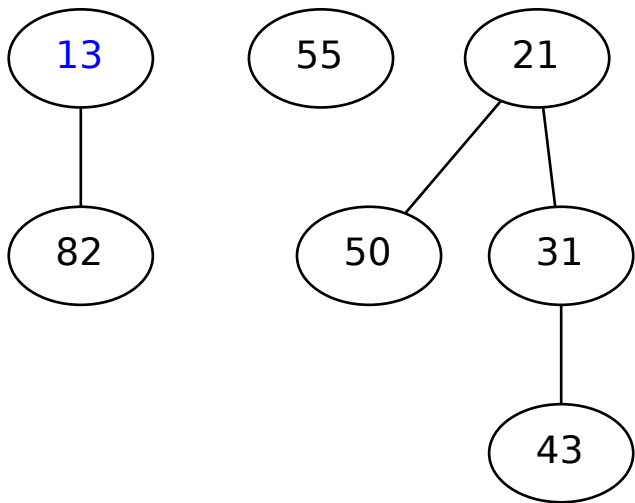
Within the invocation of  
fh\_0001.extractMin() → 12  
Status: did linking step for degree 0



After executing  
`fh_0001.extractMin()` → 12

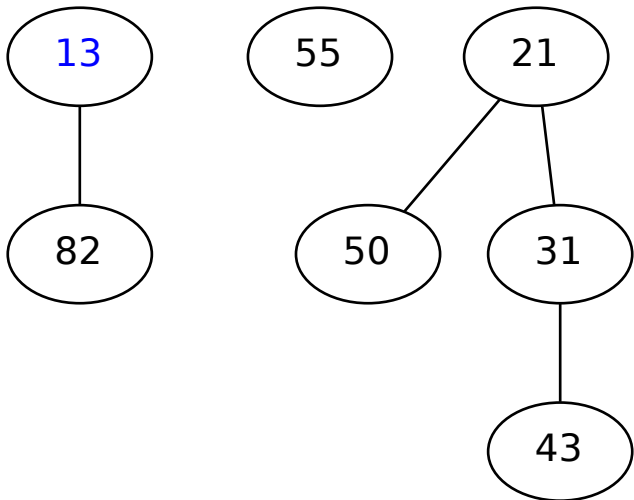
Before executing  
fh\_0001.insert(55)

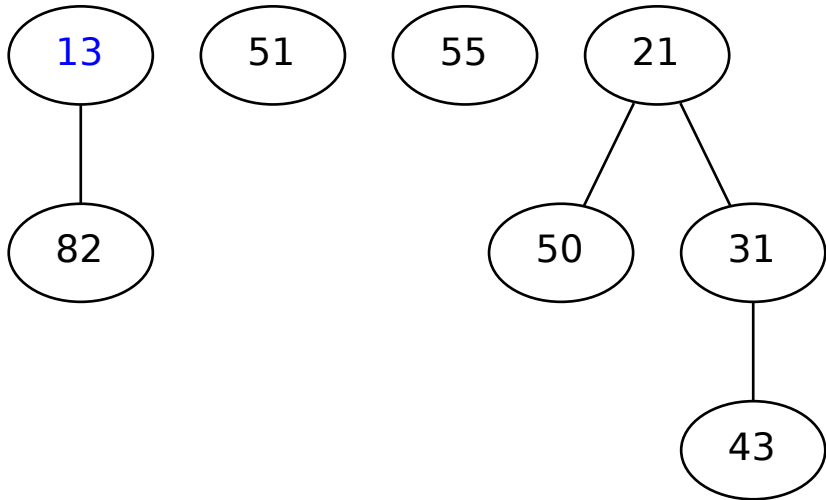




After executing  
`fh_0001.insert(55)`

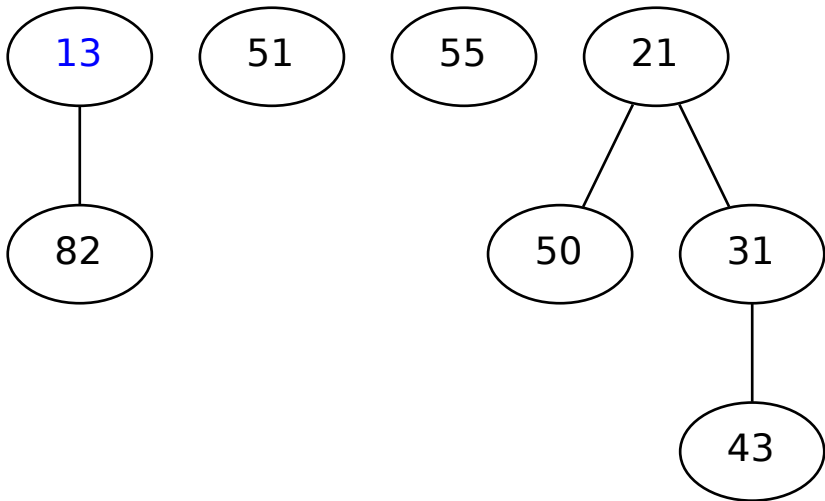
Before executing  
fh\_0001.insert(51)



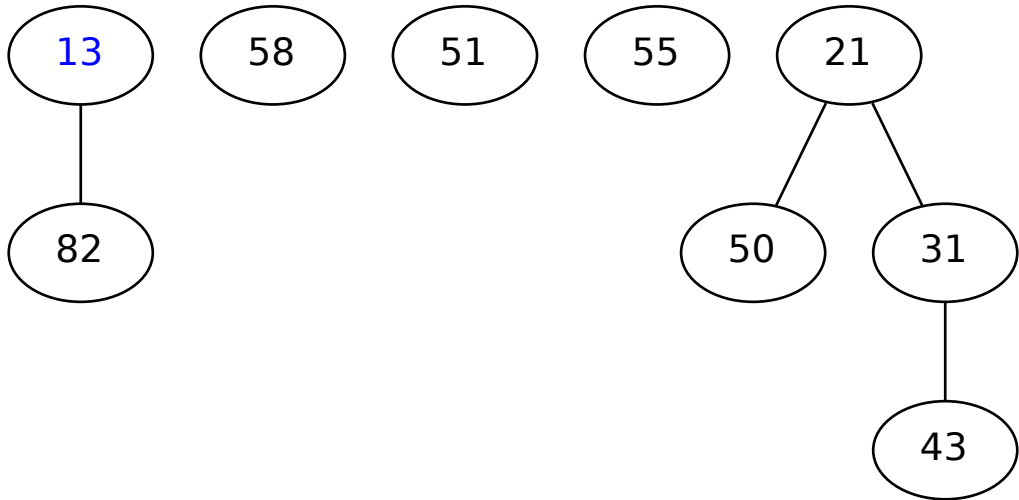


After executing  
`fh_0001.insert(51)`

Before executing  
`fh_0001.insert(58)`

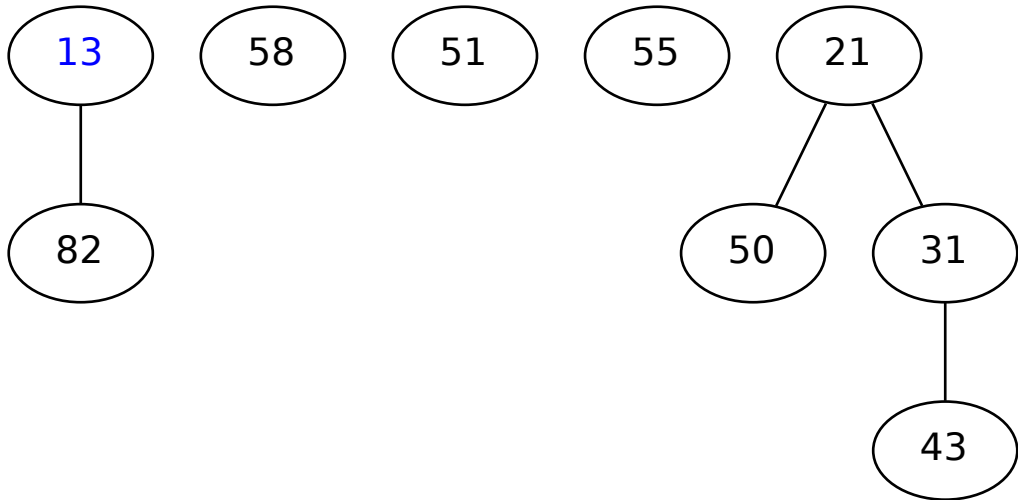


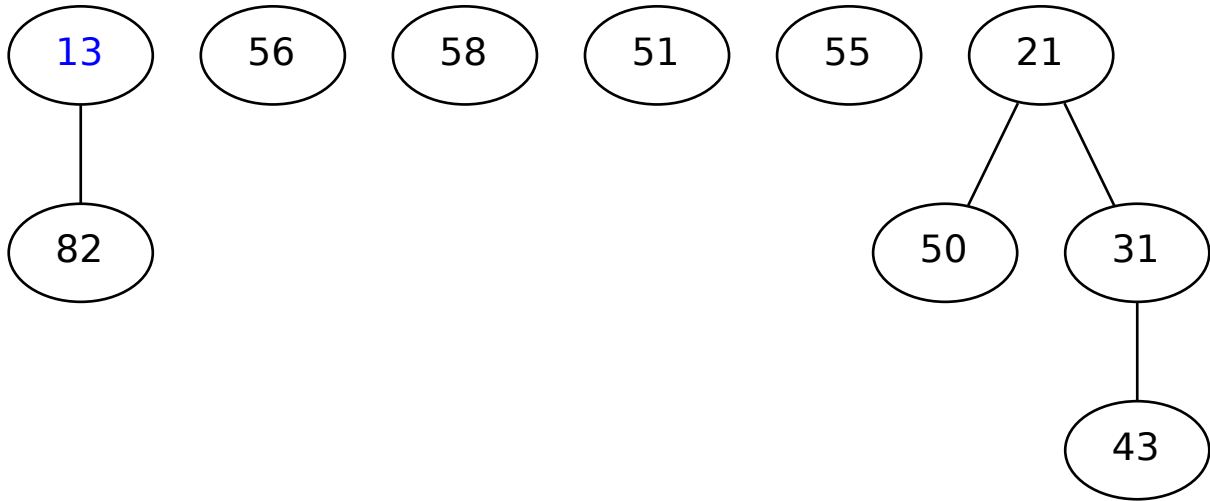




After executing  
`fh_0001.insert(58)`

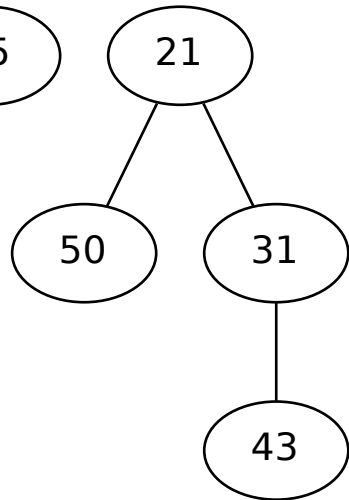
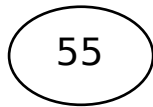
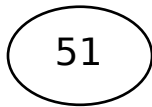
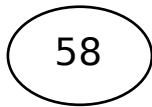
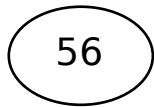
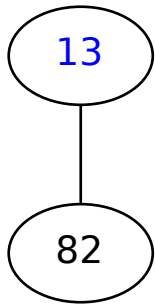
Before executing  
fh\_0001.insert(56)

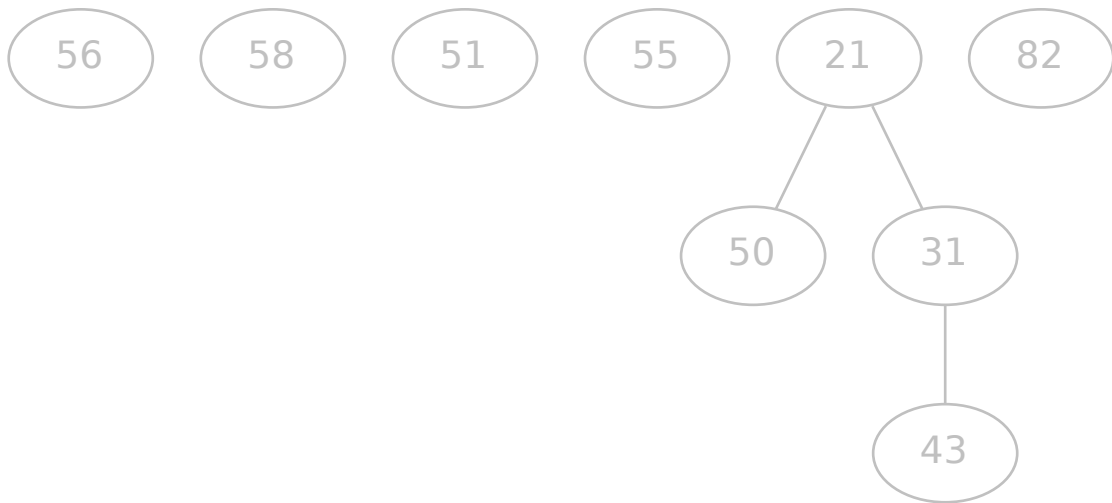




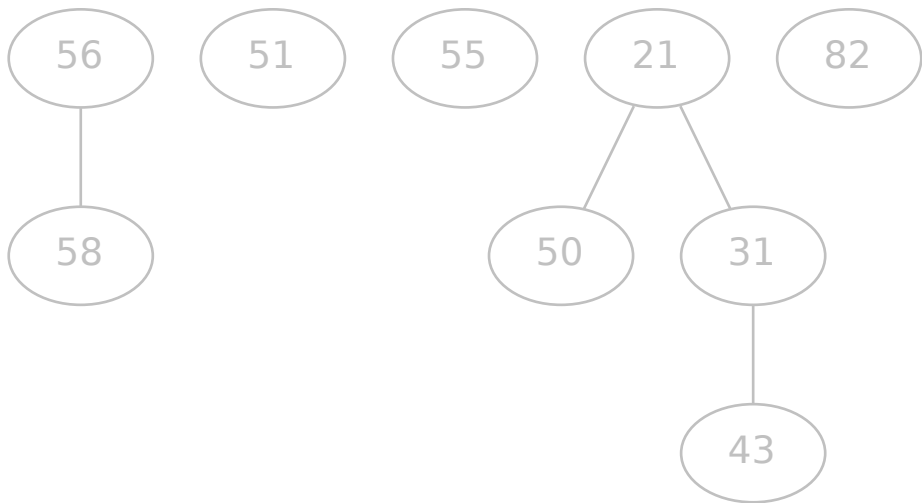
After executing  
`fh_0001.insert(56)`

Before executing  
fh\_0001.extractMin()

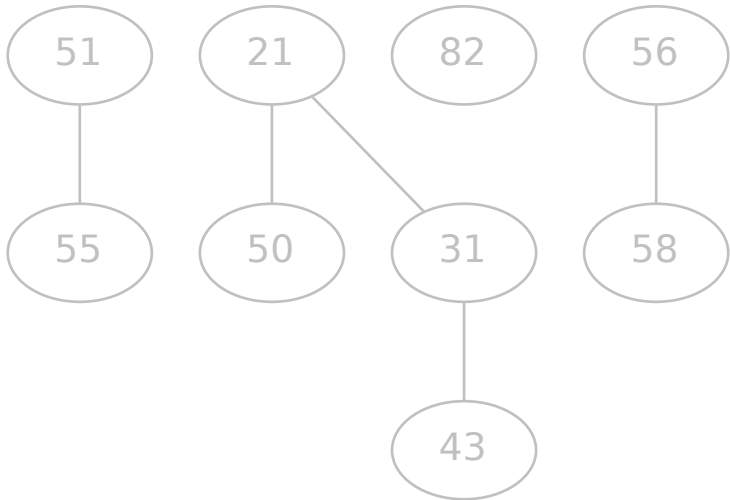




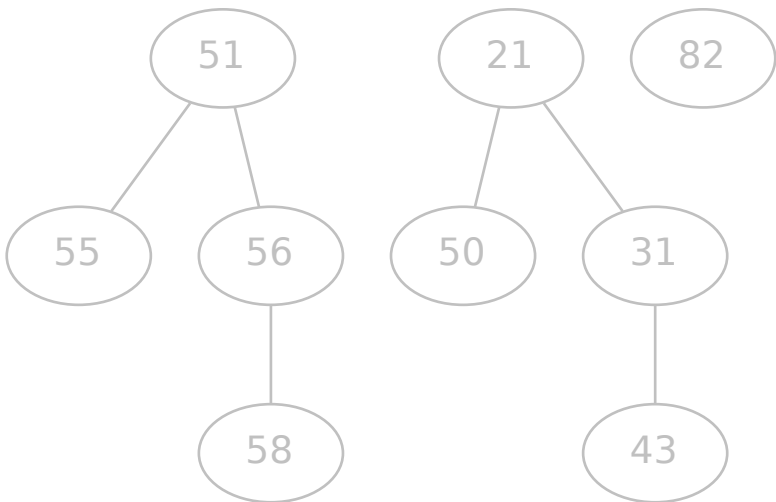
Within the invocation of  
fh\_0001.extractMin() → 13  
Status: removed min node 13



Within the invocation of  
fh\_0001.extractMin() → 13  
Status: did linking step for degree 0

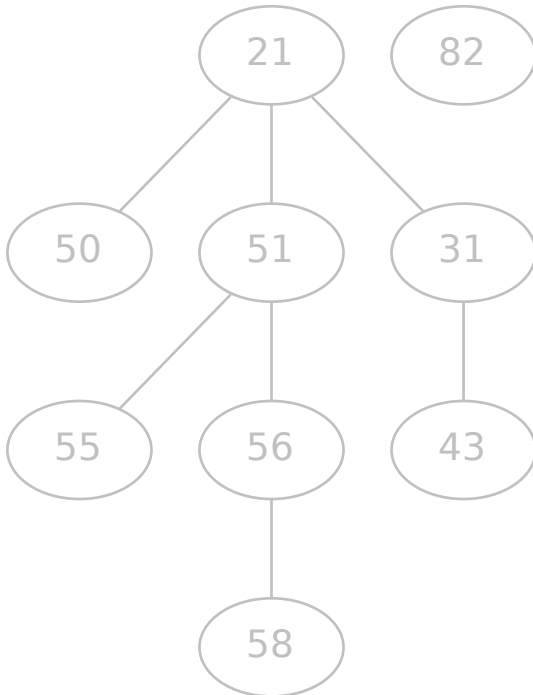


Within the invocation of  
fh\_0001.extractMin() → 13  
Status: did linking step for degree 0

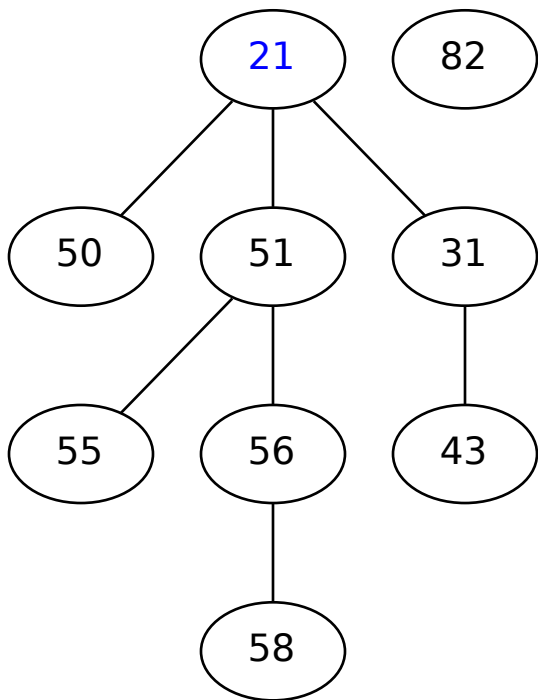


Within the invocation of  
fh\_0001.extractMin() → 13  
Status: did linking step for degree 1



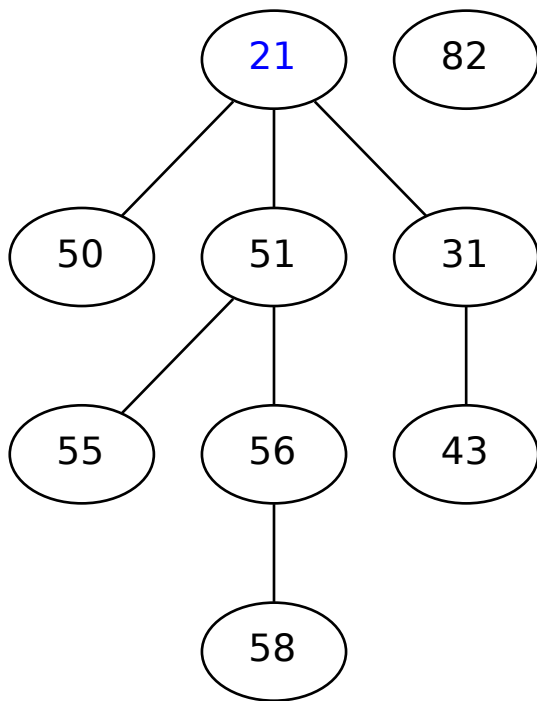


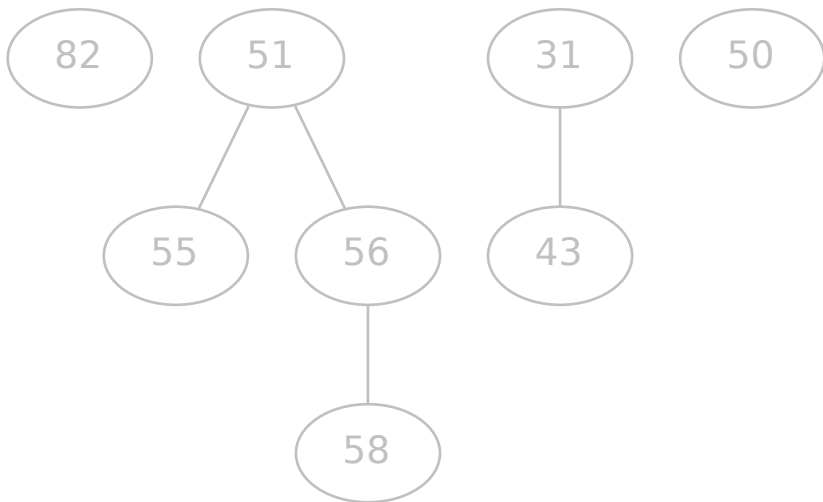
Within the invocation of  
fh\_0001.extractMin() → 13  
Status: did linking step for degree 2



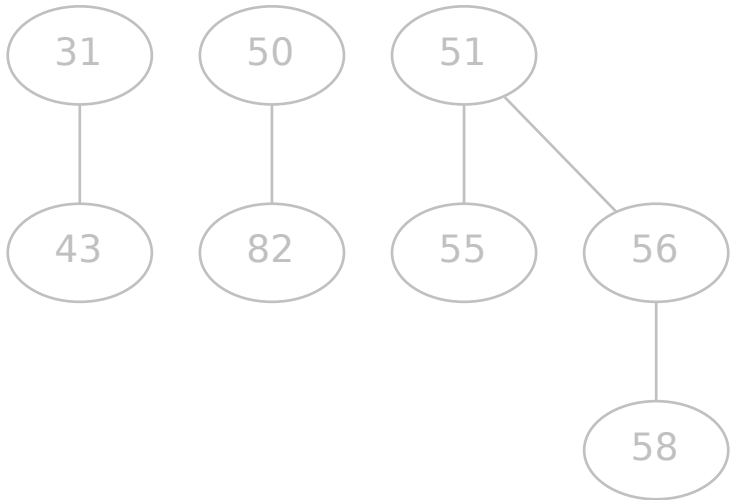
After executing  
`fh_0001.extractMin()` → 13

Before executing  
fh\_0001.extractMin()

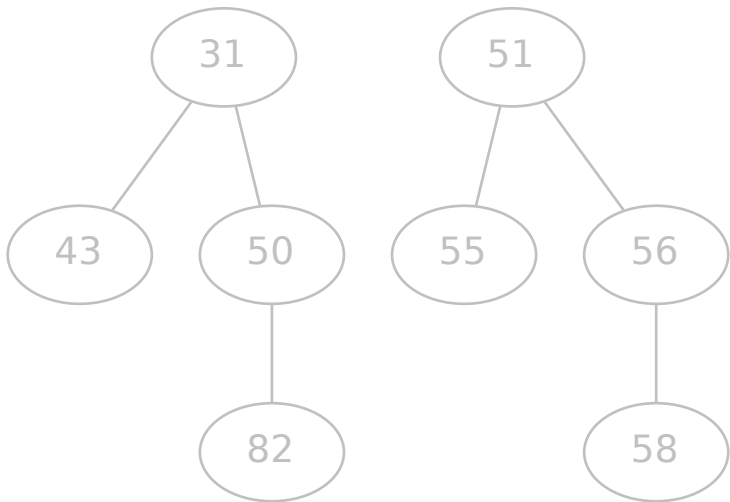




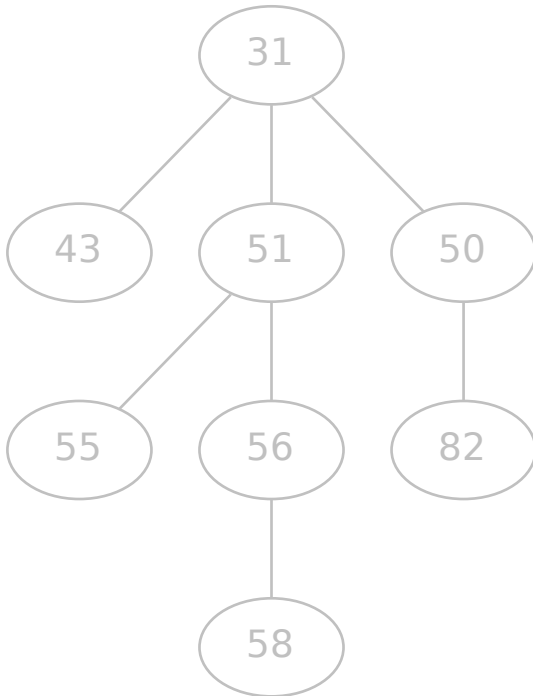
Within the invocation of  
fh\_0001.extractMin() → 21  
Status: removed min node 21



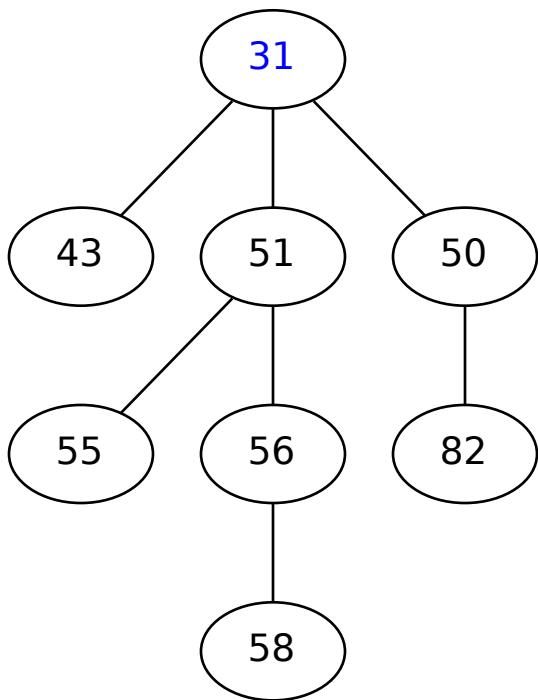
Within the invocation of  
`fh_0001.extractMin()` → 21  
Status: did linking step for degree 0



Within the invocation of  
`fh_0001.extractMin()` → 21  
Status: did linking step for degree 1



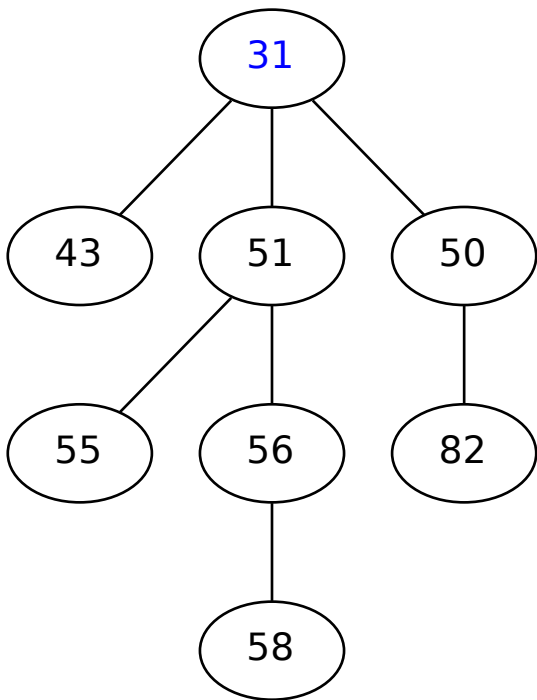
Within the invocation of  
fh\_0001.extractMin() → 21  
Status: did linking step for degree 2

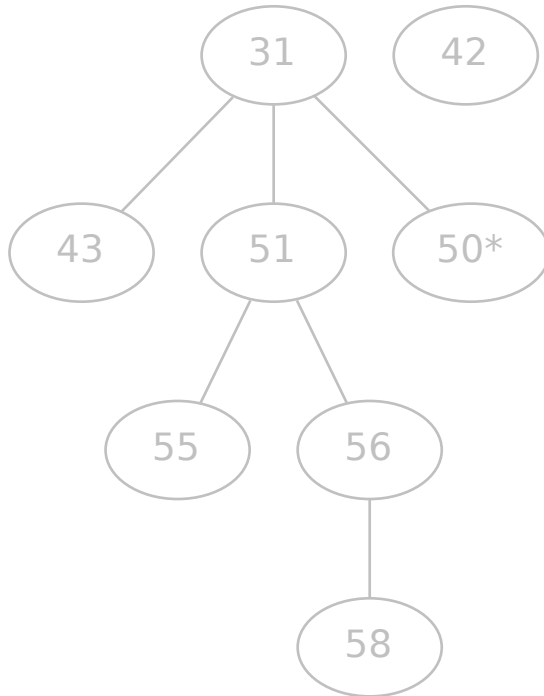


After executing  
`fh_0001.extractMin()` → 21

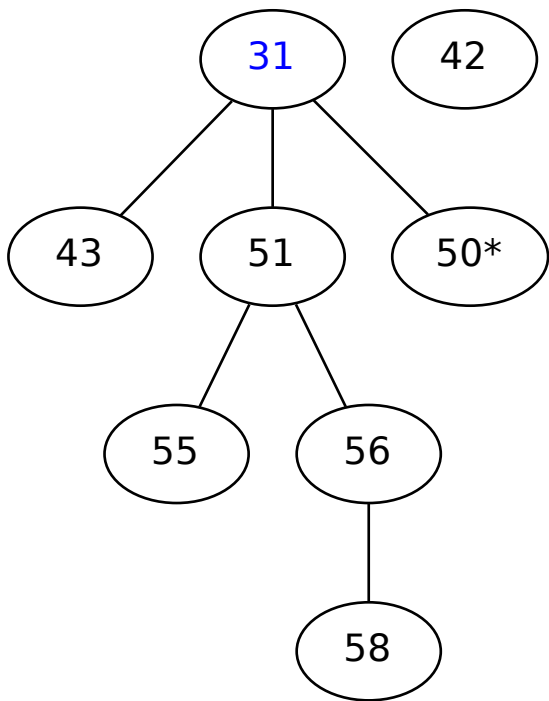


Before executing  
fh\_0001.decreaseKey(82, 40)



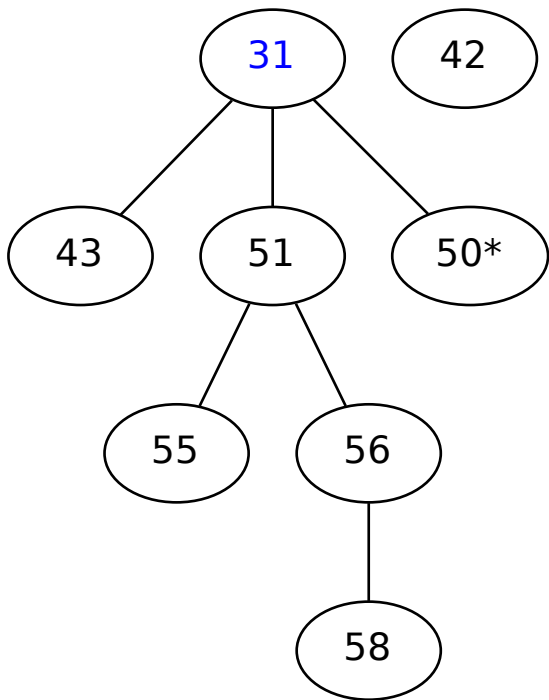


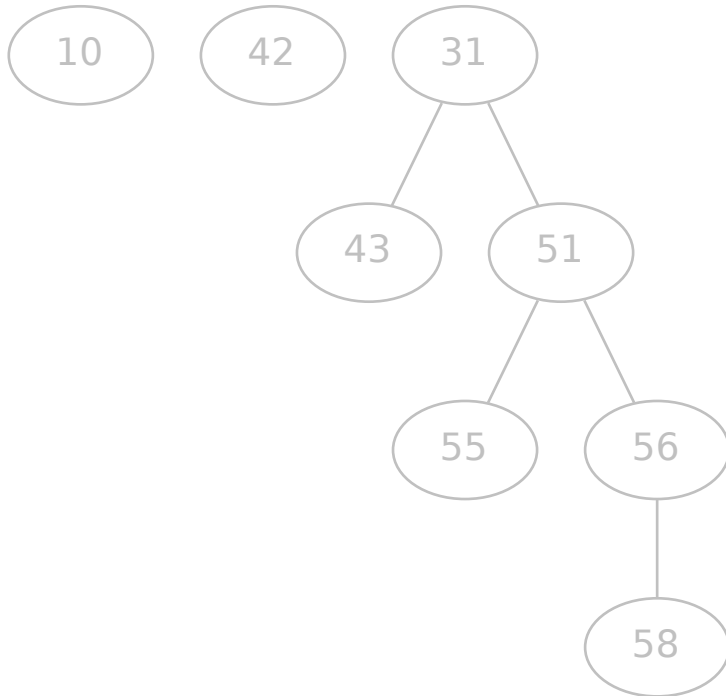
Within the invocation of  
fh\_0001.decreaseKey(82, 40)  
Status: spliced out 82 (now 42) and made it a root



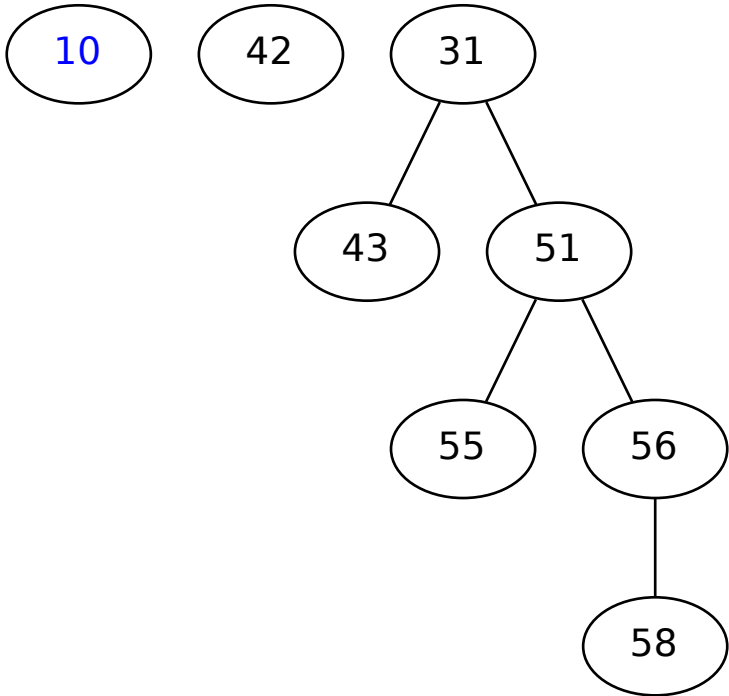
After executing  
`fh_0001.decreaseKey(82, 40)`

Before executing  
fh\_0001.decreaseKey(50, 40)



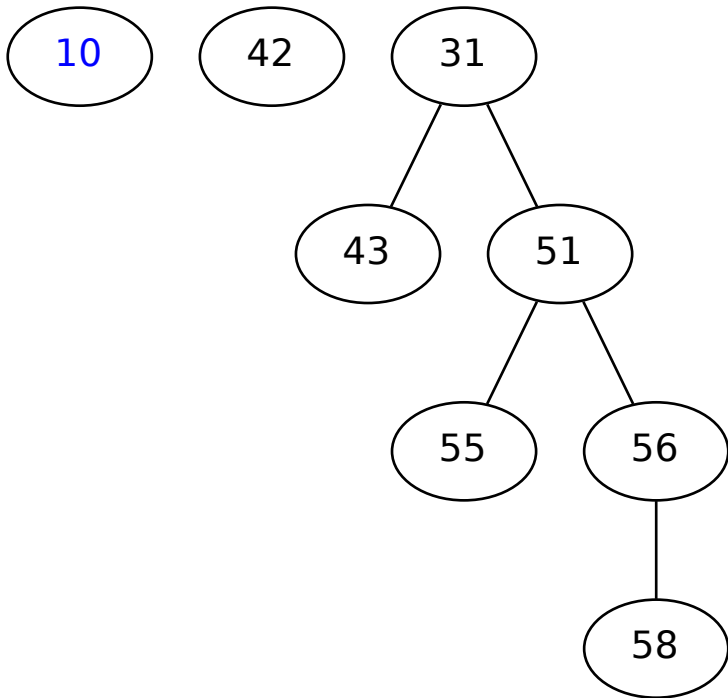


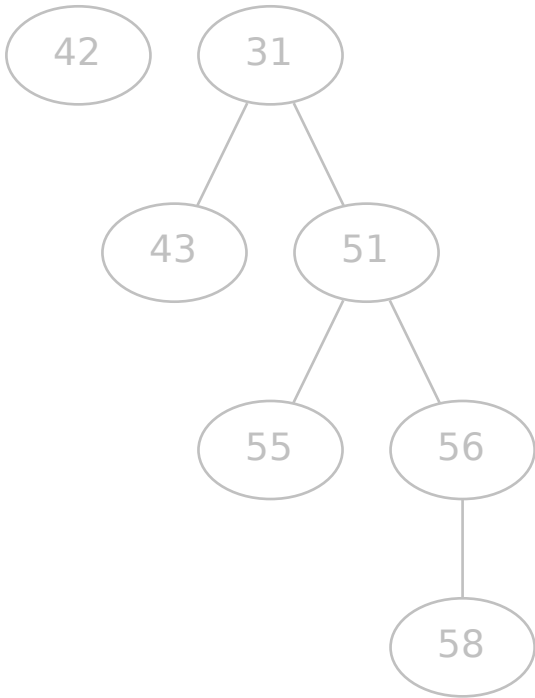
Within the invocation of  
`fh_0001.decreaseKey(50, 40)`  
Status: spliced out 50 (now 10) and made it a root



After executing  
`fh_0001.decreaseKey(50, 40)`

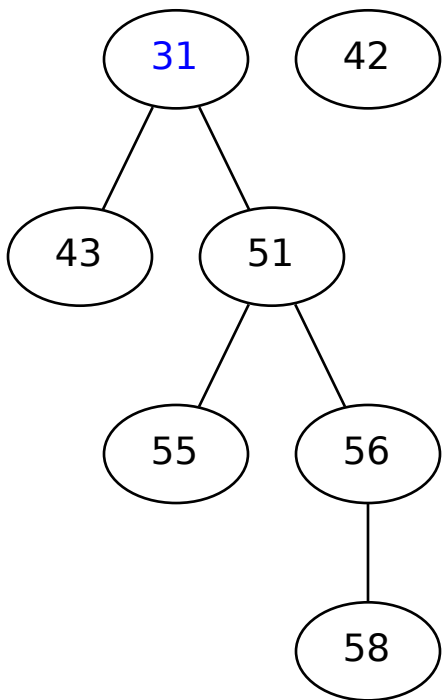
Before executing  
fh\_0001.extractMin()





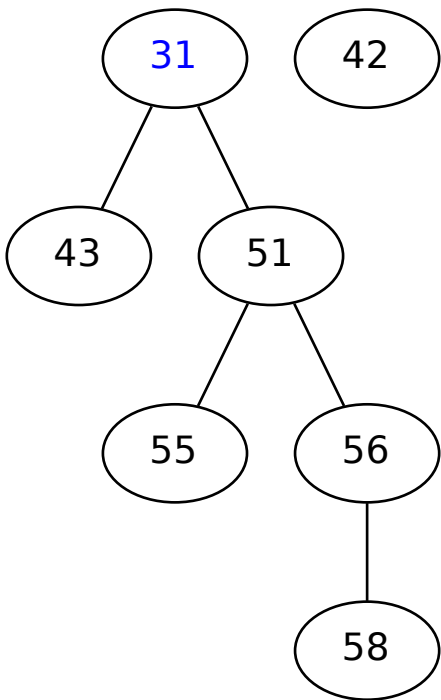
Within the invocation of  
`fh_0001.extractMin()` → 10  
Status: removed min node 10

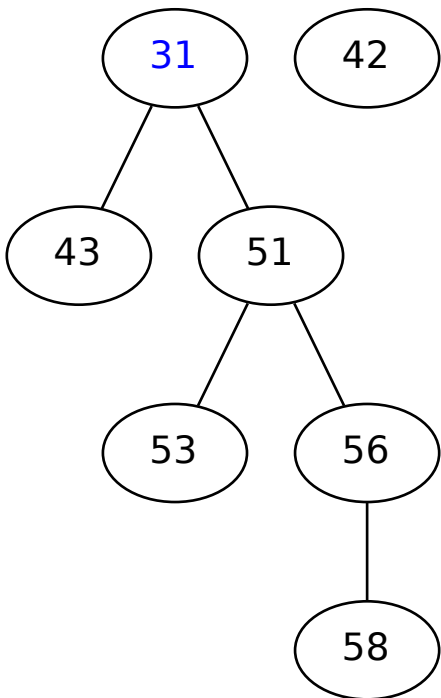




After executing  
`fh_0001.extractMin()` → 10

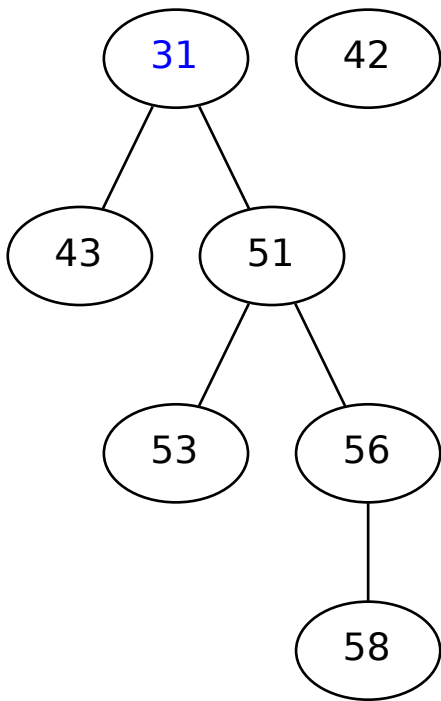
Before executing  
fh\_0001.decreaseKey(55, 2)

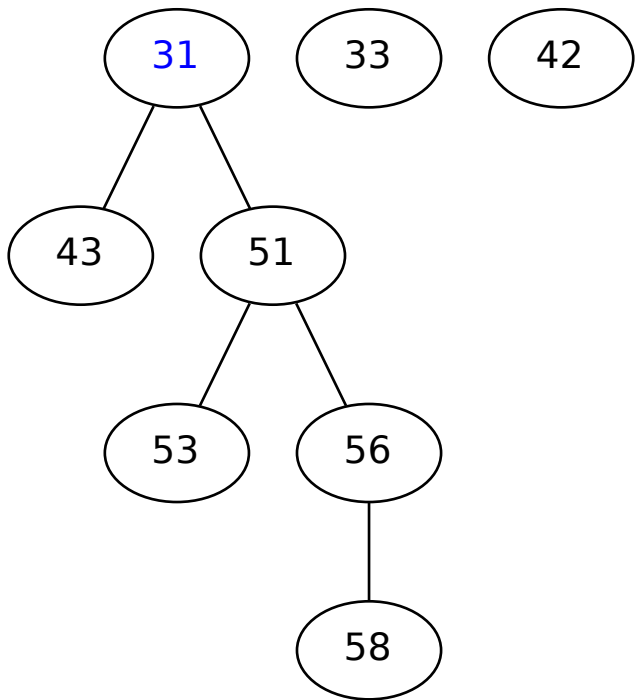




After executing  
`fh_0001.decreaseKey(55, 2)`

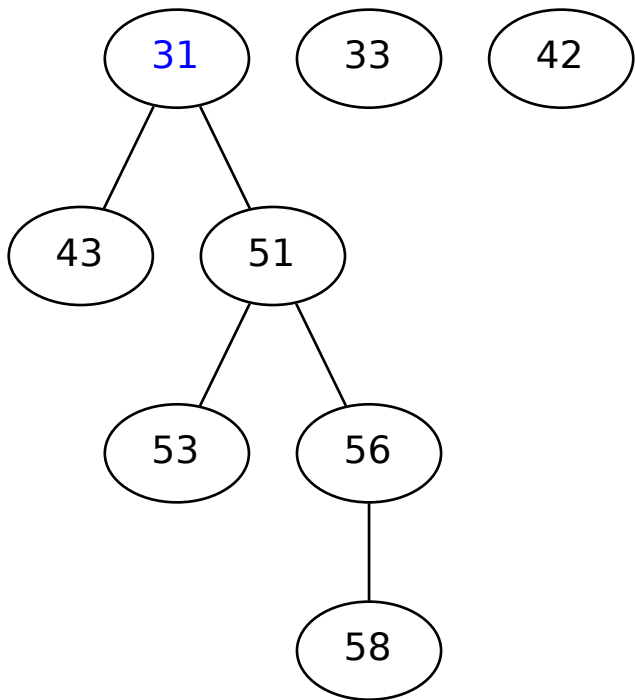
Before executing  
`fh_0001.insert(33)`

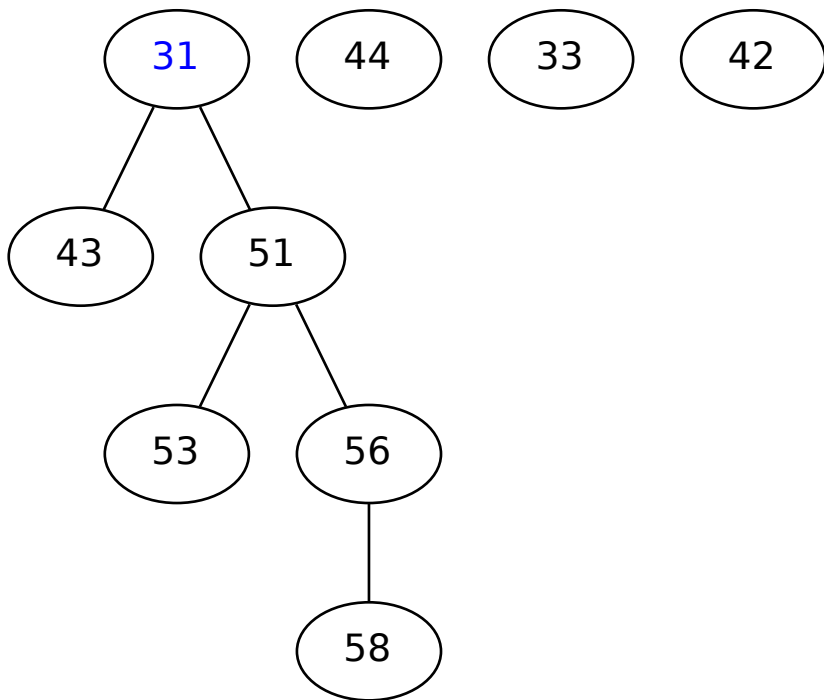




After executing  
`fh_0001.insert(33)`

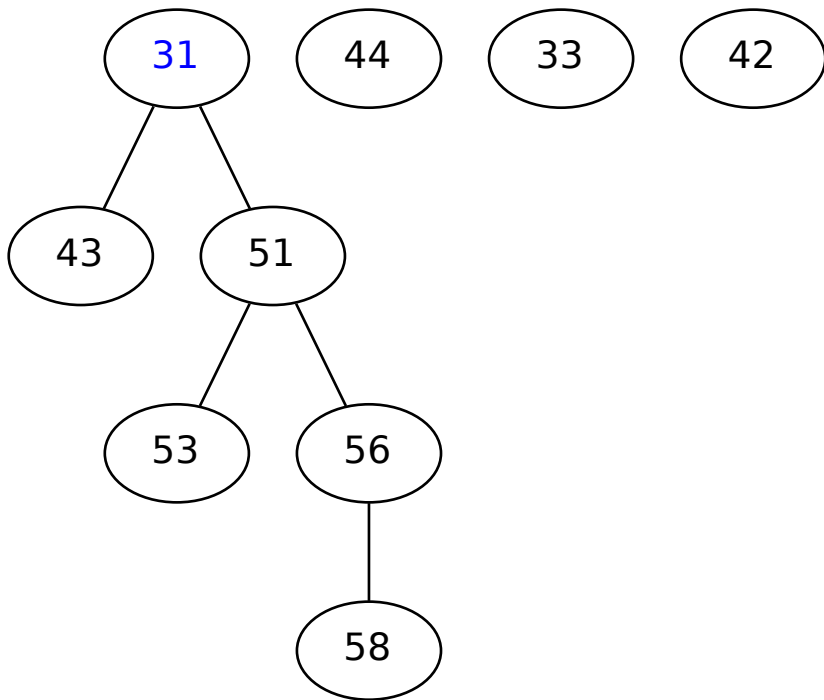
Before executing  
fh\_0001.insert(44)



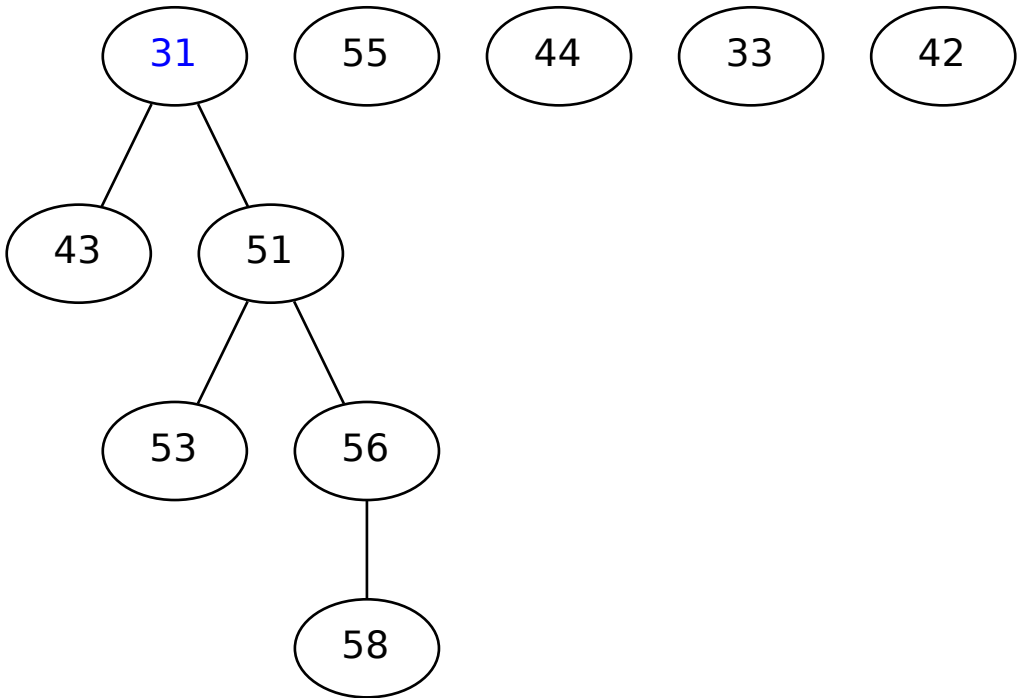


After executing  
fh\_0001.insert(44)

Before executing  
fh\_0001.insert(55)

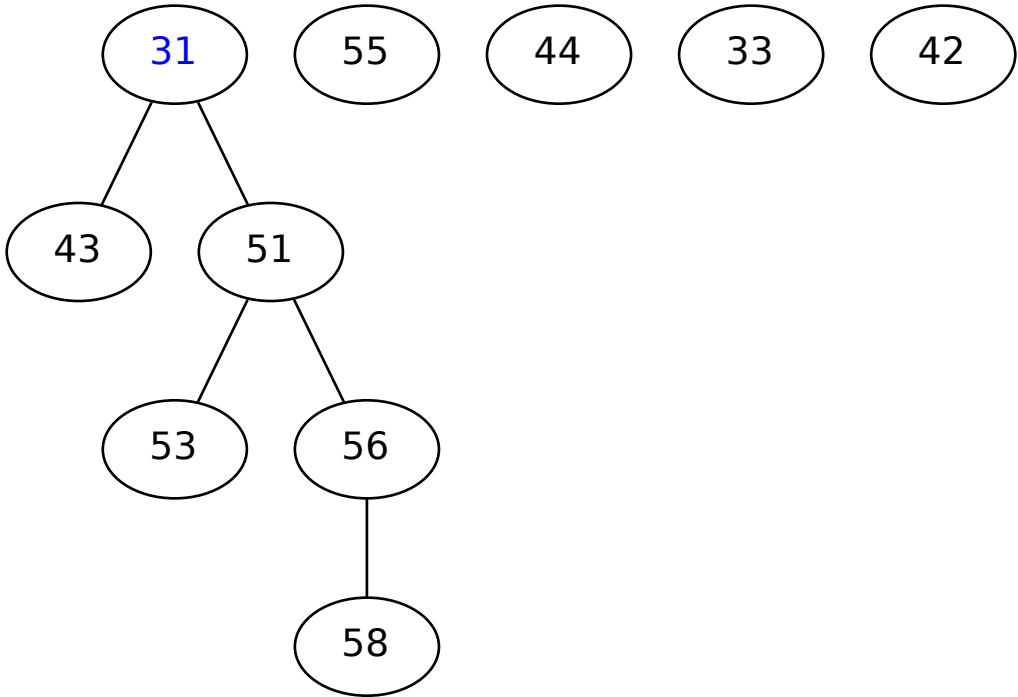


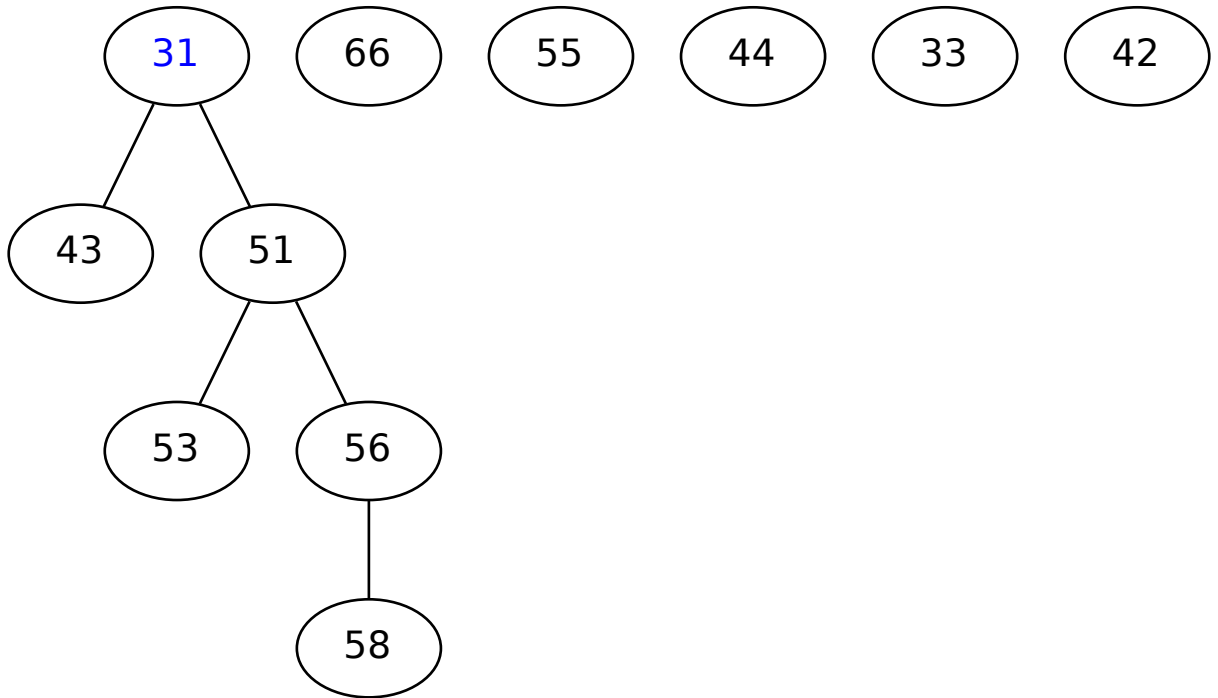




After executing  
fh\_0001.insert(55)

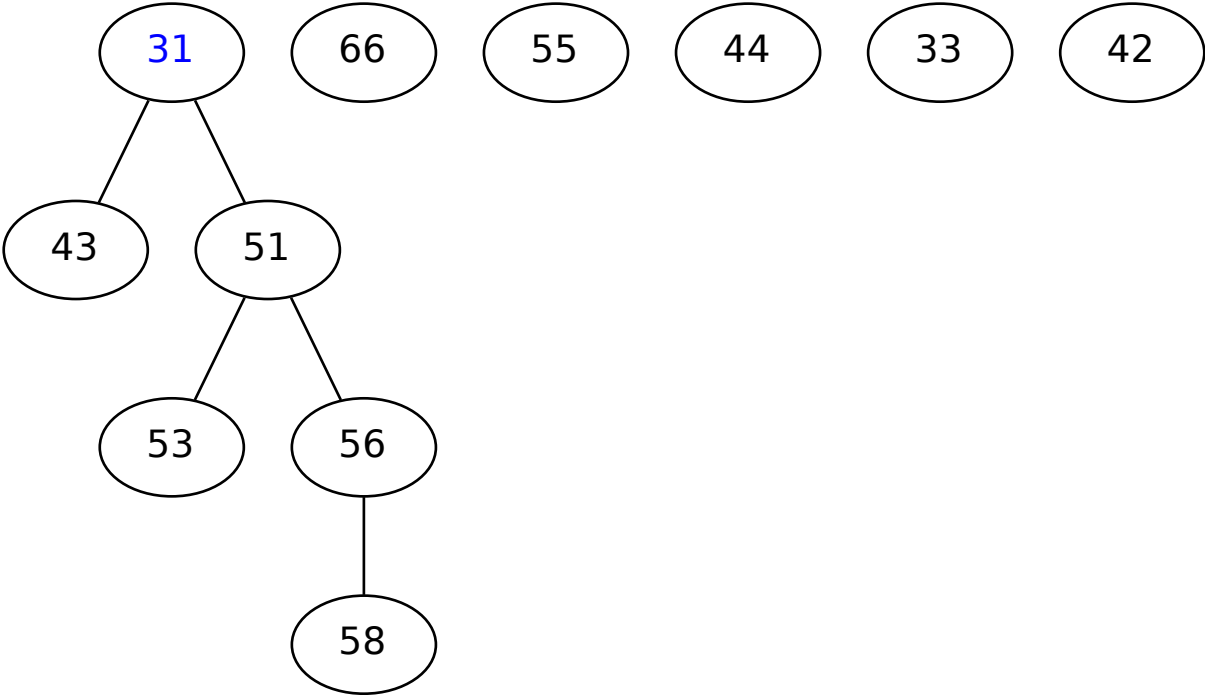
Before executing  
fh\_0001.insert(66)

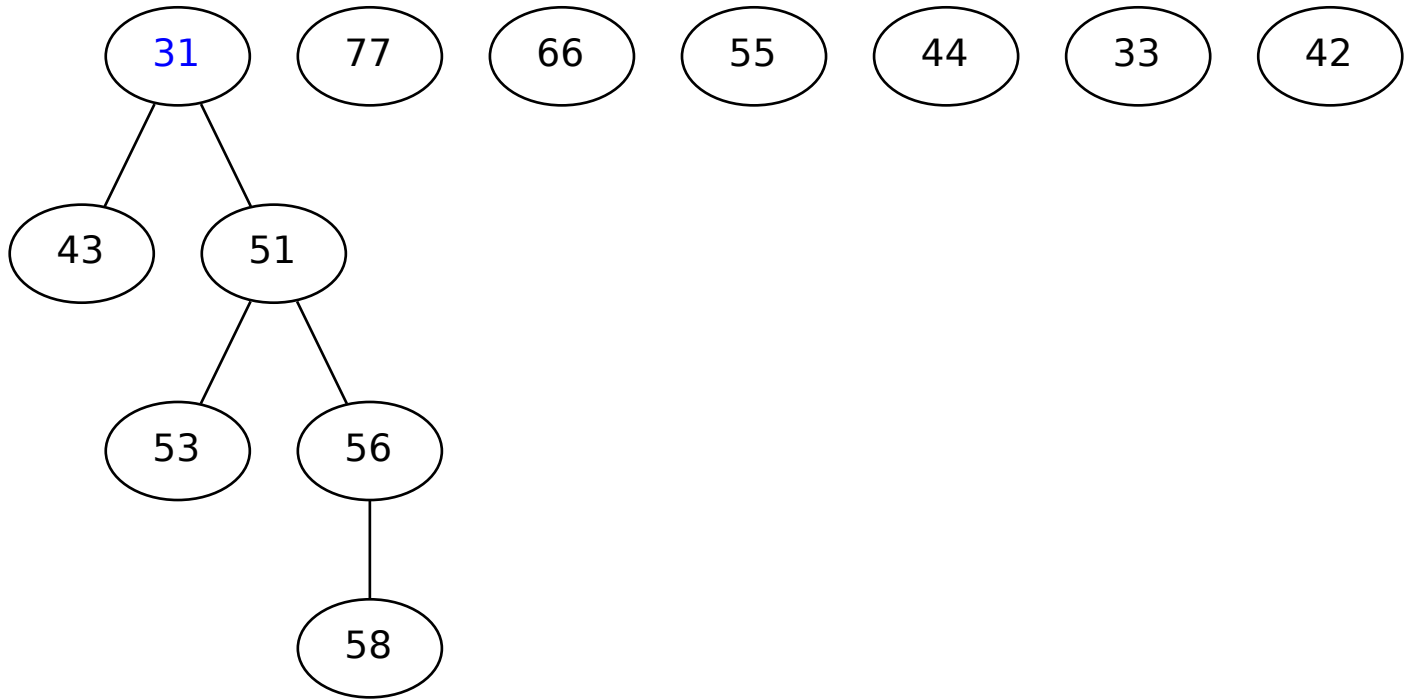




After executing  
`fh_0001.insert(66)`

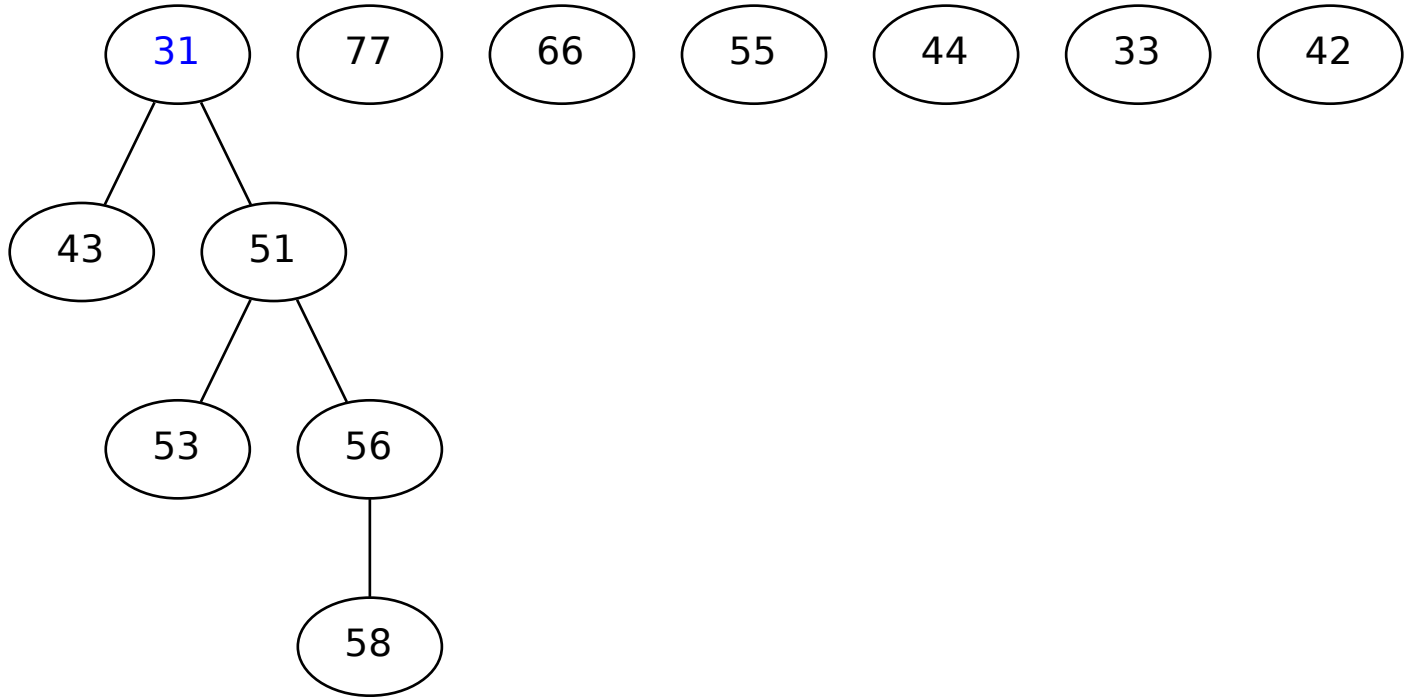
Before executing  
fh\_0001.insert(77)

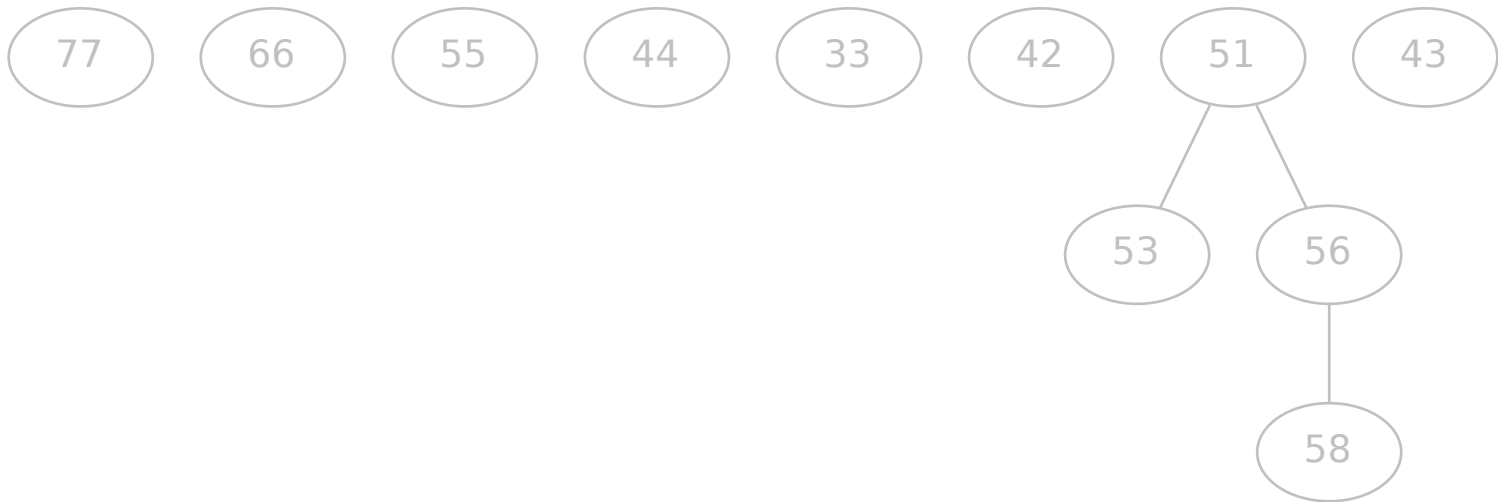




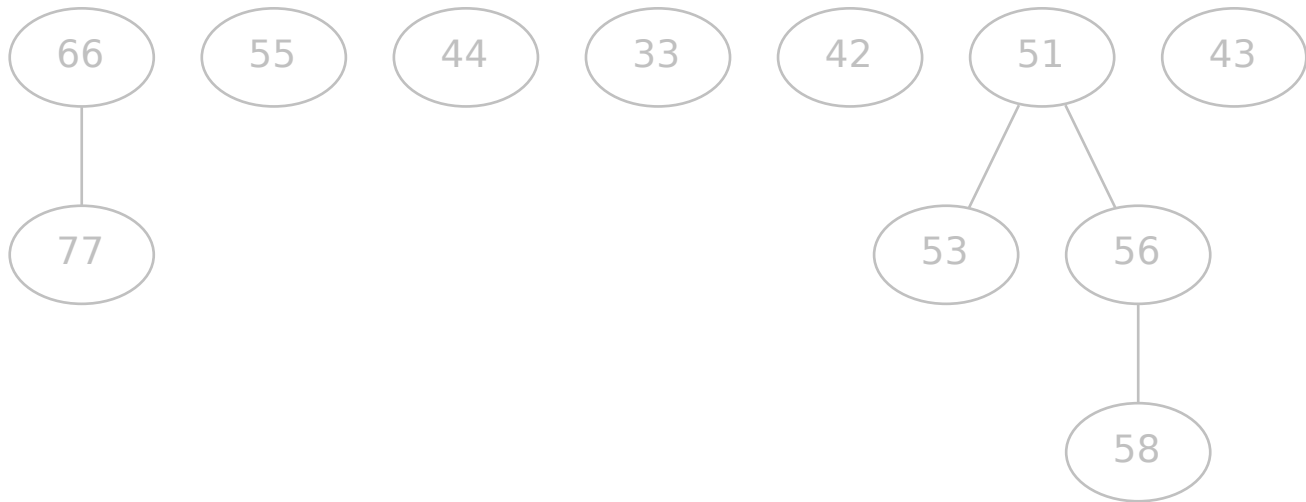
After executing  
`fh_0001.insert(77)`

Before executing  
fh\_0001.extractMin()



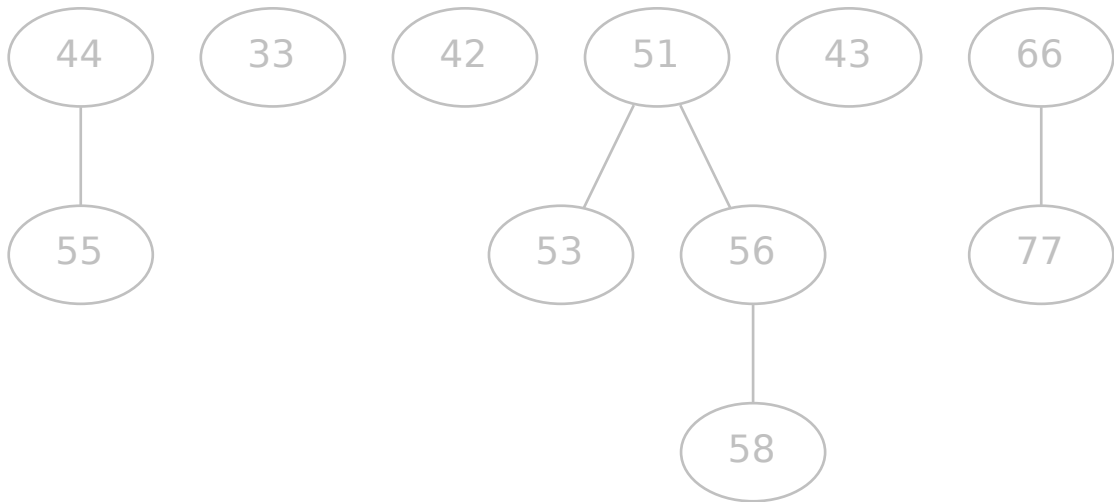


Within the invocation of  
fh\_0001.extractMin() → 31  
Status: removed min node 31

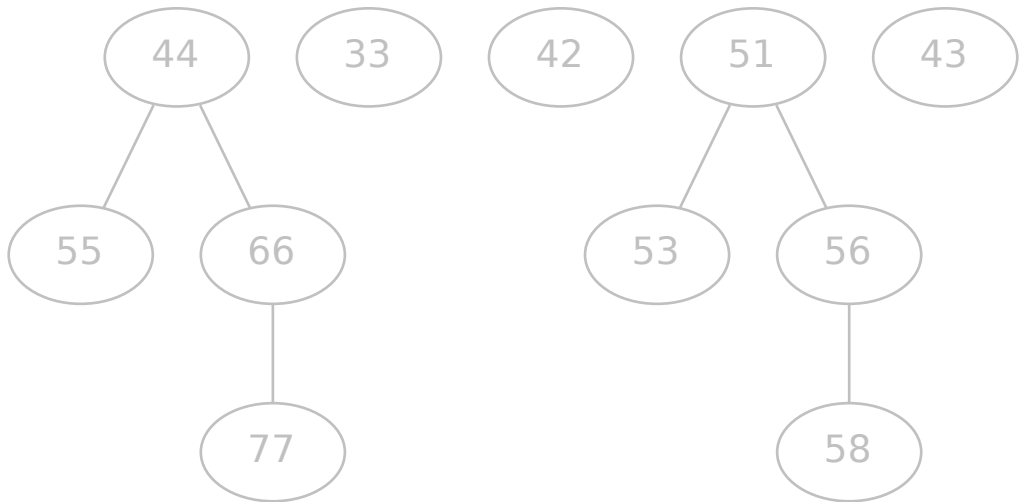


Within the invocation of  
fh\_0001.extractMin() → 31  
Status: did linking step for degree 0

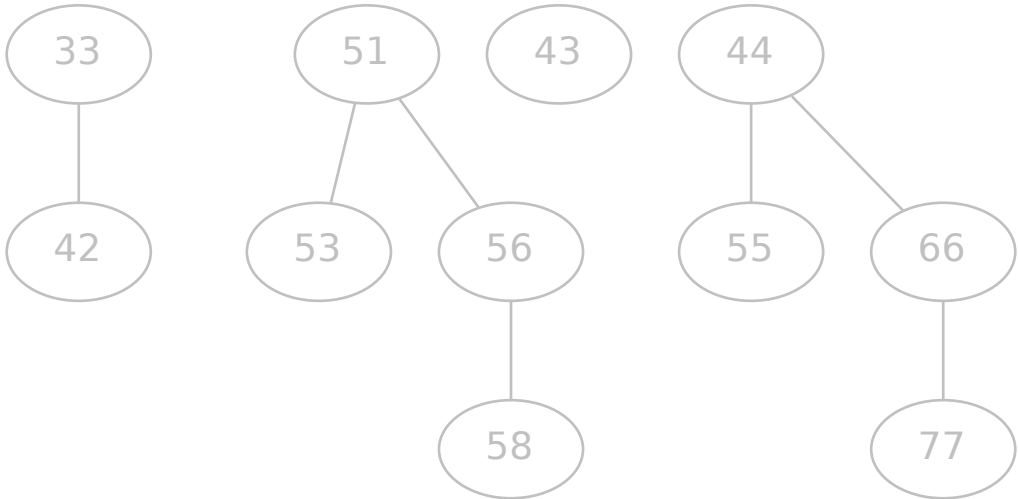




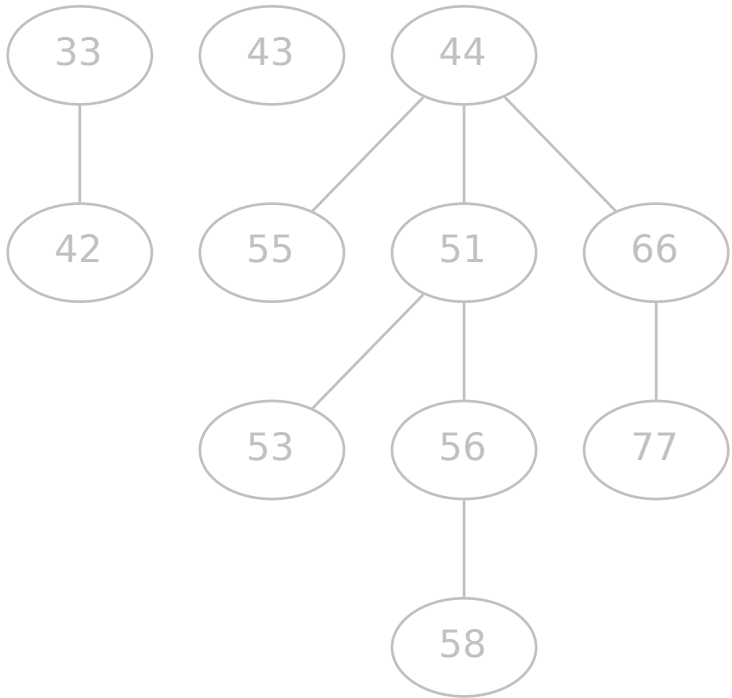
Within the invocation of  
fh\_0001.extractMin() → 31  
Status: did linking step for degree 0



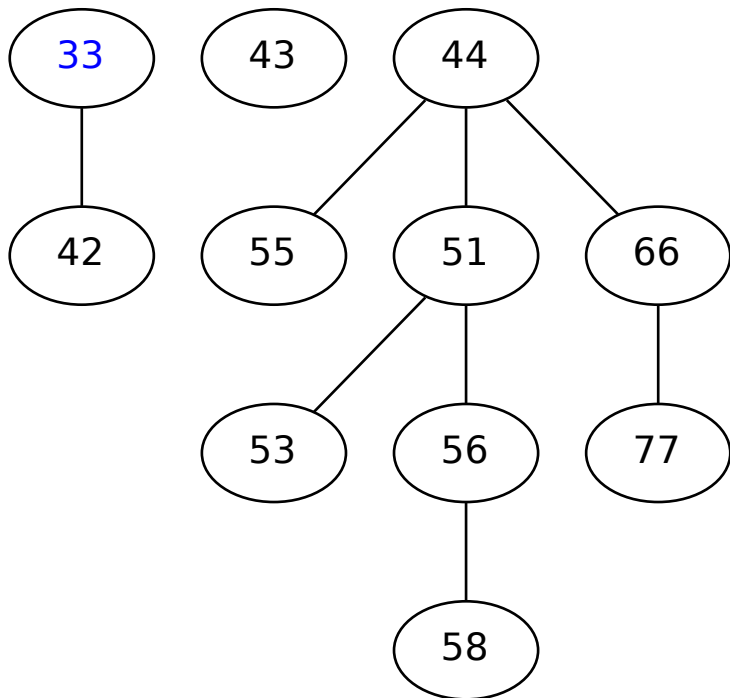
Within the invocation of  
fh\_0001.extractMin() → 31  
Status: did linking step for degree 1



Within the invocation of  
fh\_0001.extractMin() → 31  
Status: did linking step for degree 0

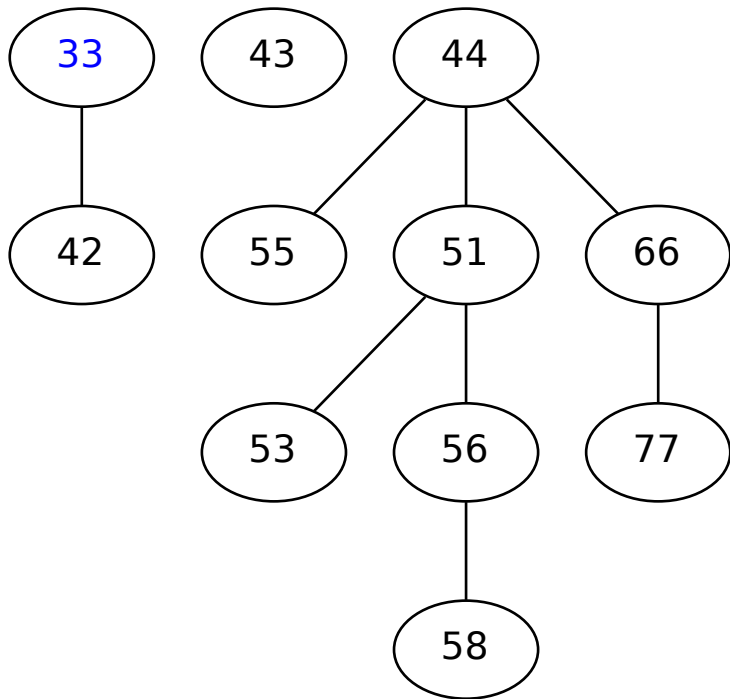


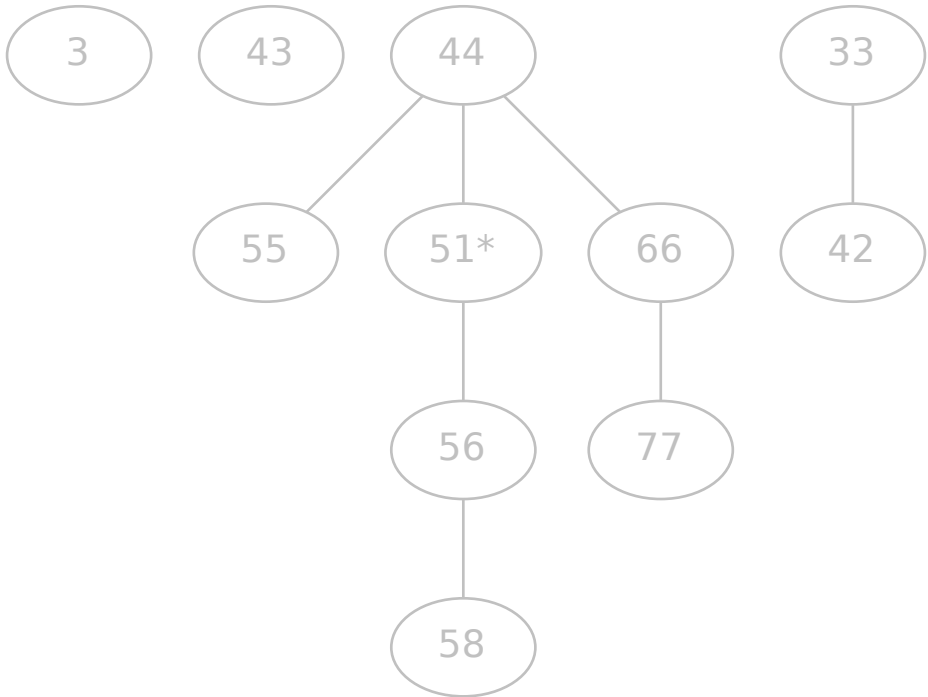
Within the invocation of  
fh\_0001.extractMin() → 31  
Status: did linking step for degree 2



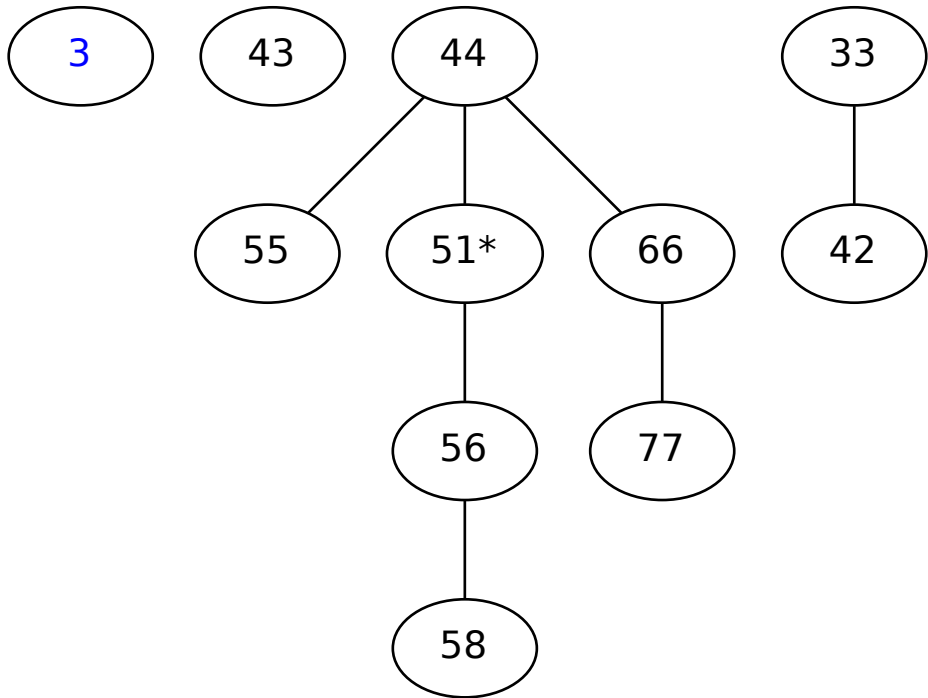
After executing  
fh\_0001.extractMin() → 31

Before executing  
fh\_0001.decreaseKey(53, 50)





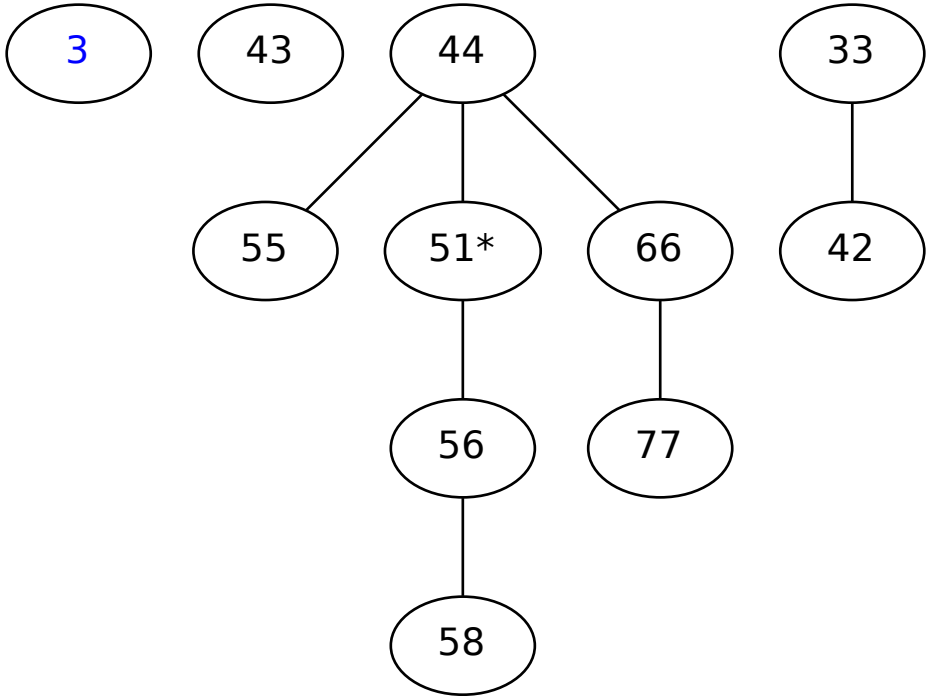
Within the invocation of  
fh\_0001.decreaseKey(53, 50)  
Status: spliced out 53 (now 3) and made it a root

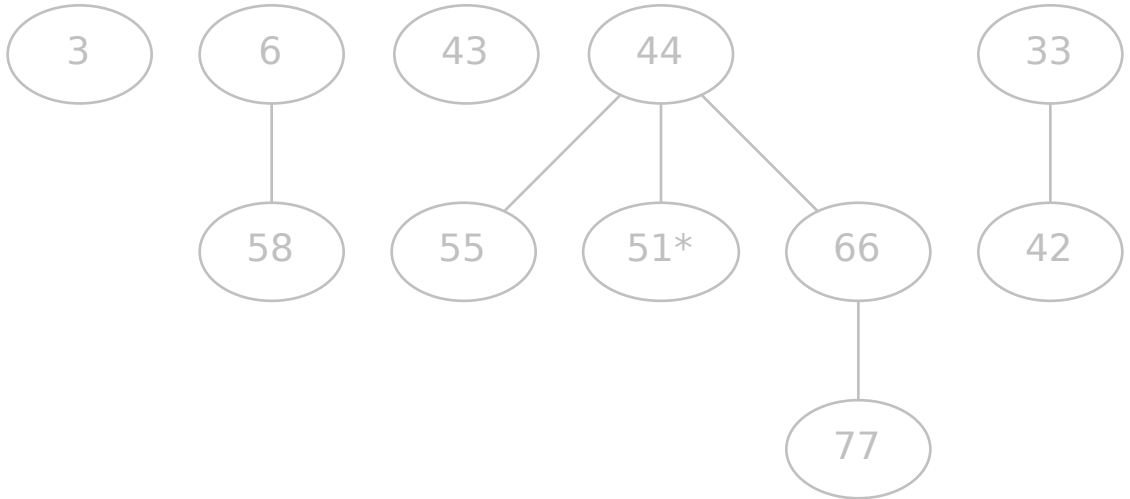


After executing  
fh\_0001.decreaseKey(53, 50)

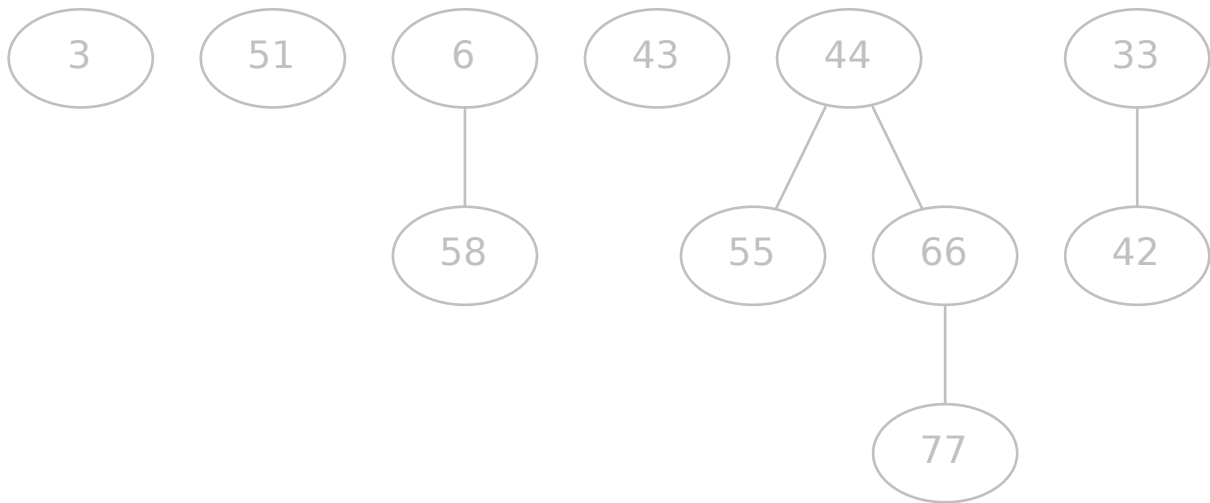


Before executing  
fh\_0001.decreaseKey(56, 50)

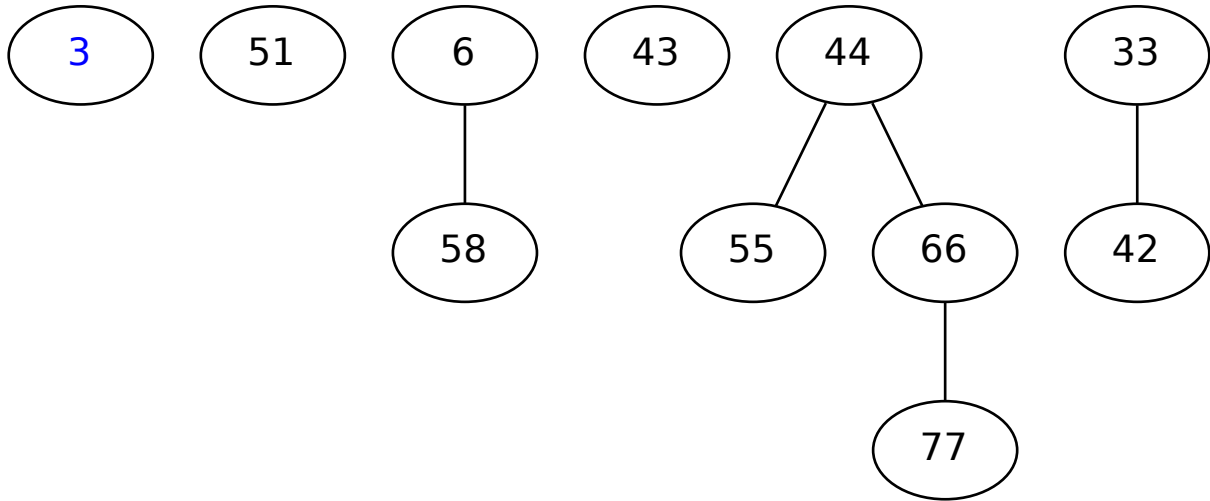




Within the invocation of  
fh\_0001.decreaseKey(56, 50)  
Status: spliced out 56 (now 6) and made it a root

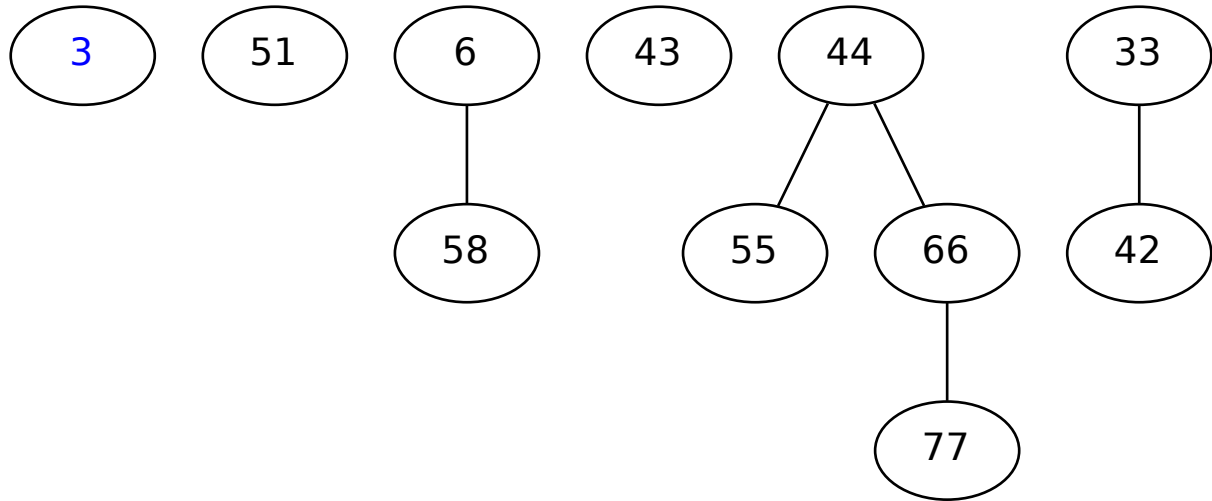


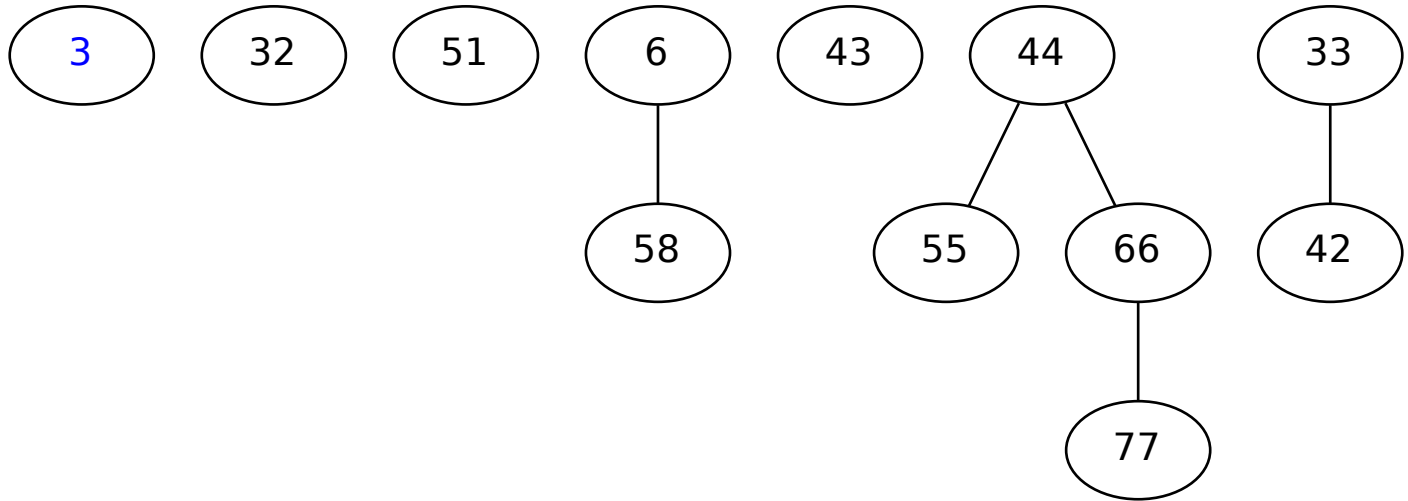
Within the invocation of  
fh\_0001.decreaseKey(56, 50)  
Status: cascading cut: spliced out 51 and made it a root



After executing  
`fh_0001.decreaseKey(56, 50)`

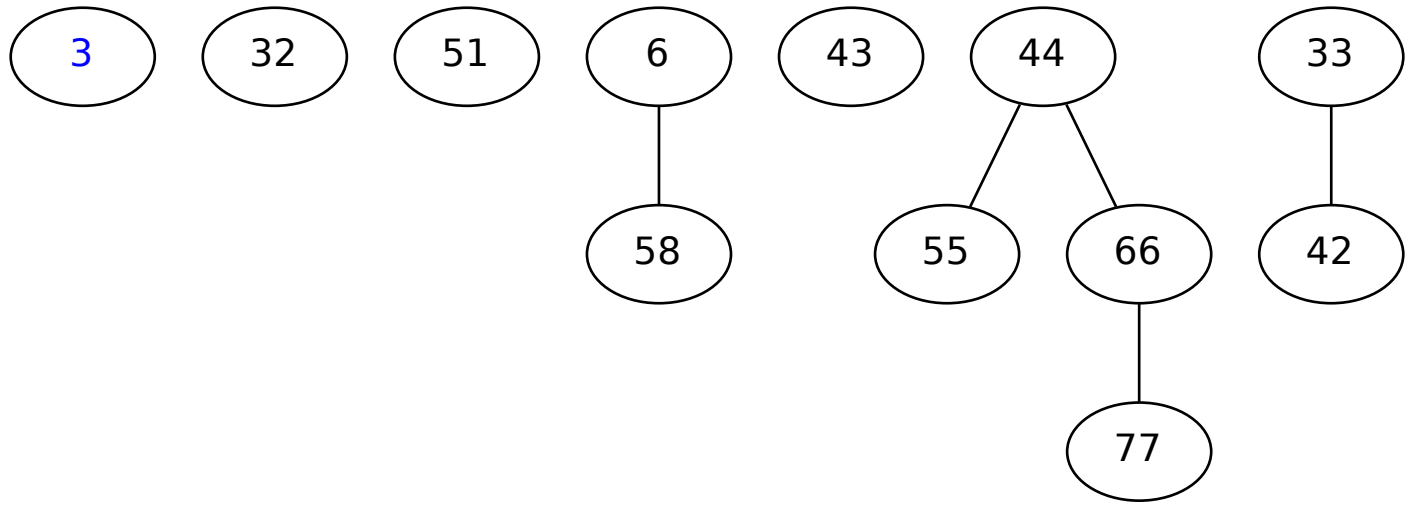
Before executing  
fh\_0001.insert(32)

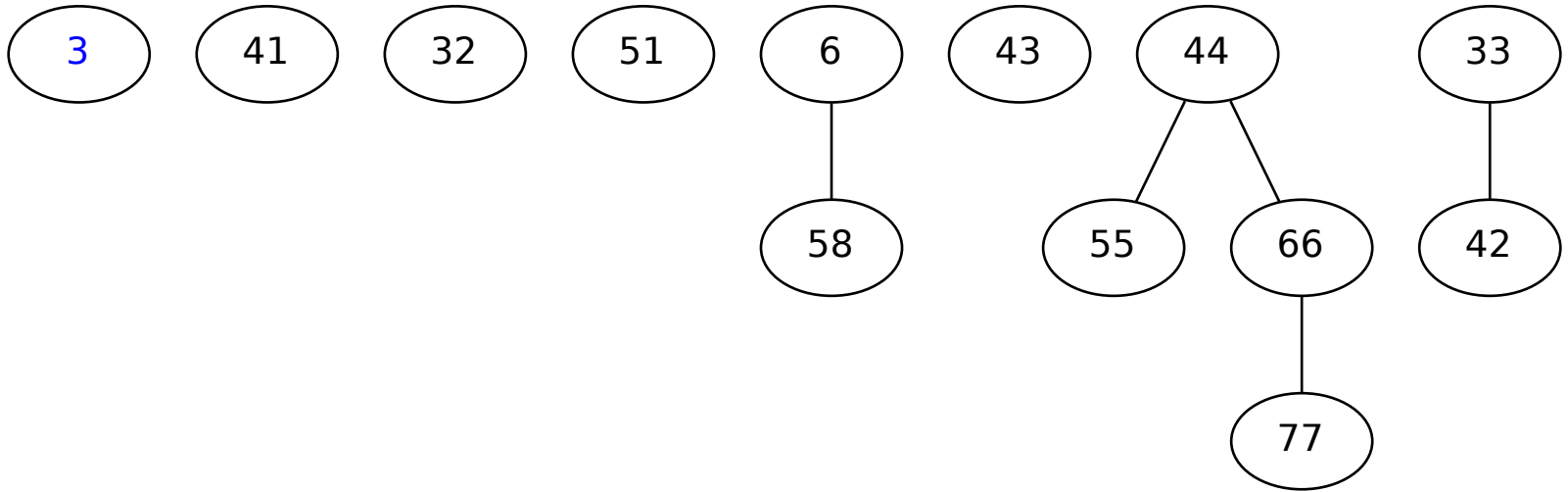




After executing  
`fh_0001.insert(32)`

Before executing  
fh\_0001.insert(41)

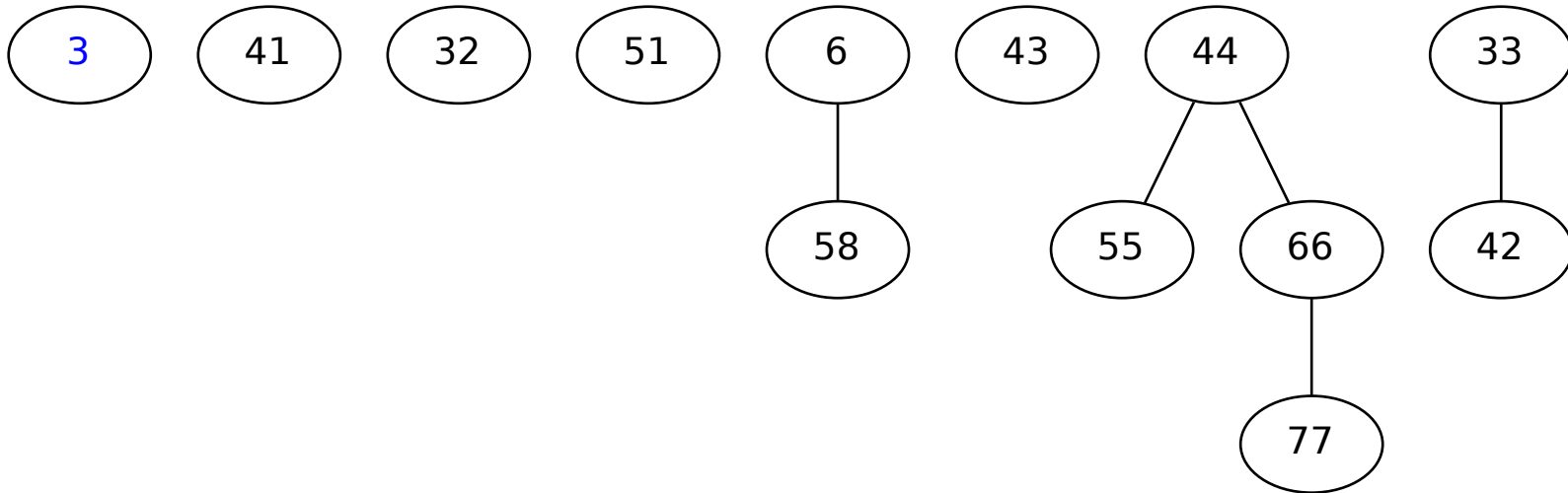


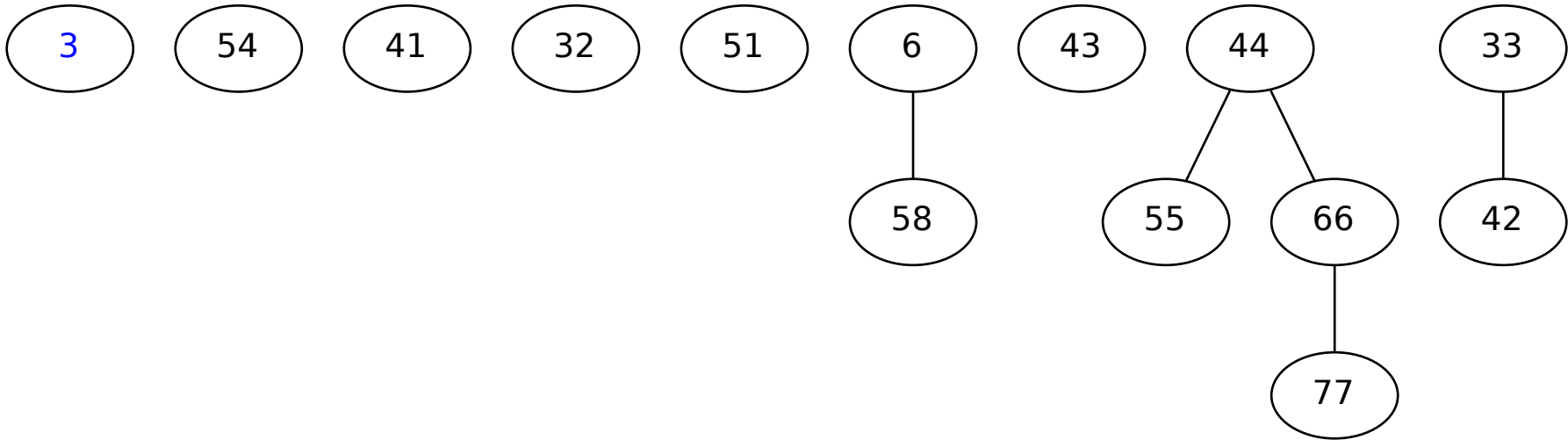


After executing  
fh\_0001.insert(41)



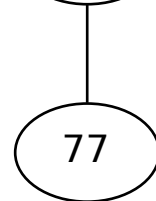
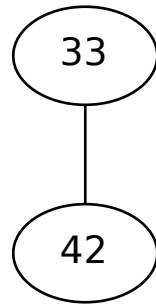
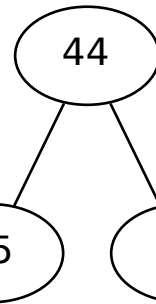
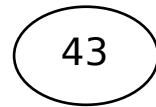
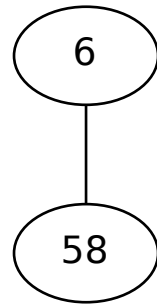
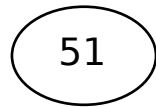
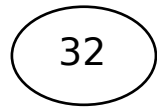
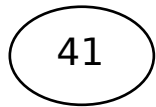
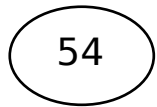
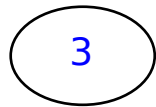
Before executing  
fh\_0001.insert(54)

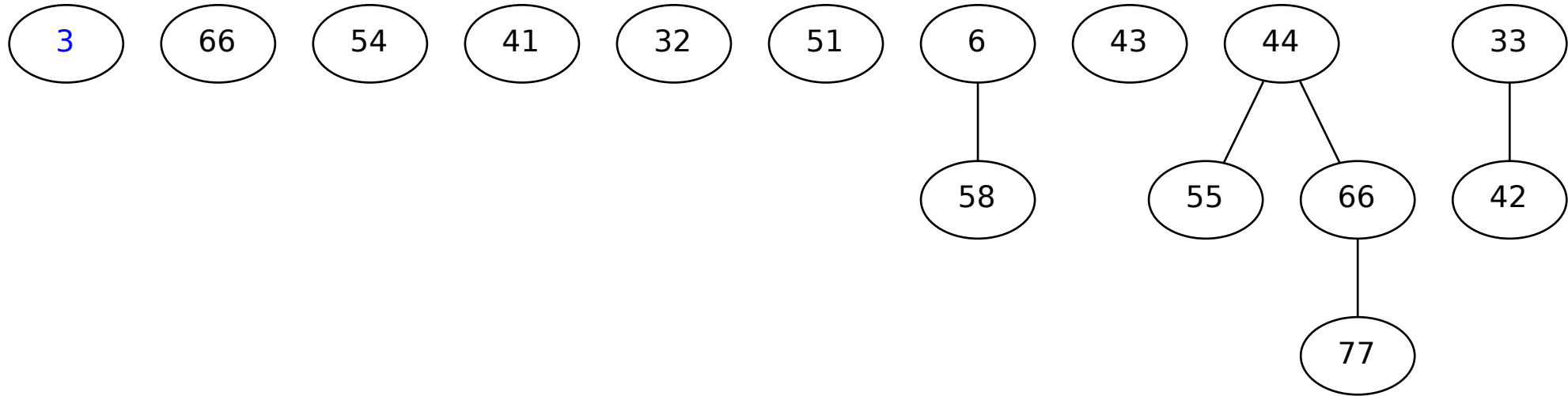




After executing  
fh\_0001.insert(54)

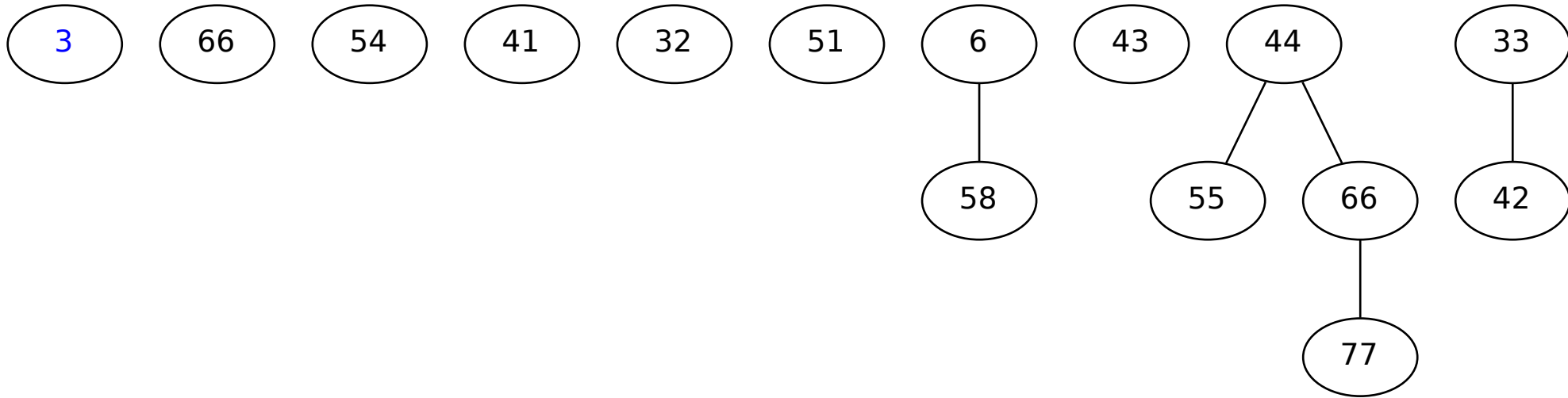
Before executing  
fh\_0001.insert(66)

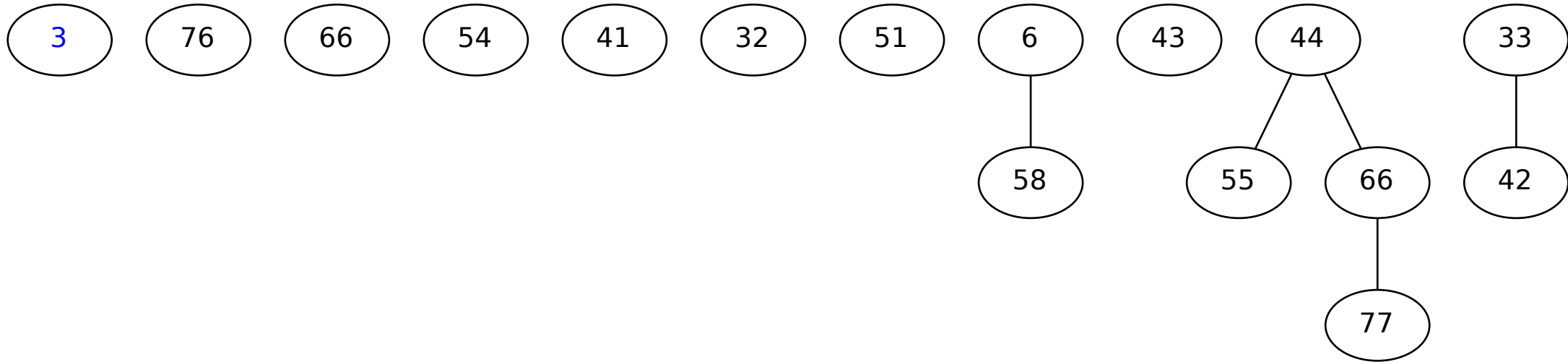




After executing  
fh\_0001.insert(66)

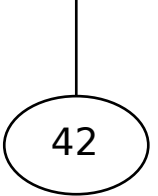
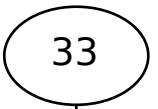
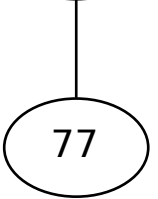
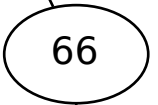
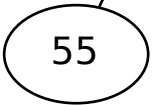
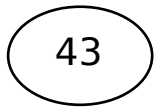
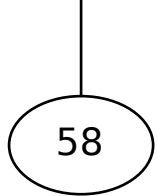
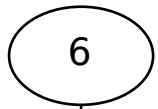
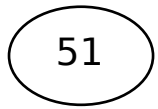
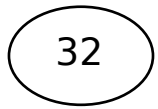
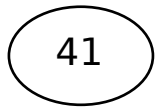
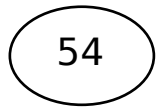
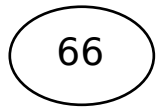
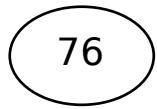
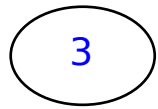
Before executing  
fh\_0001.insert(76)

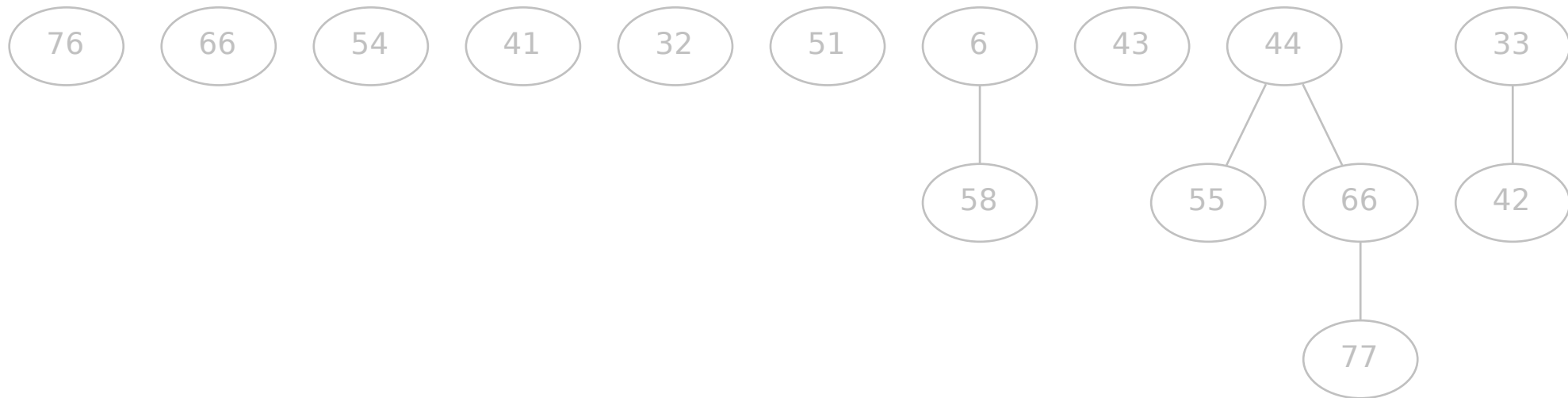




After executing  
fh\_0001.insert(76)

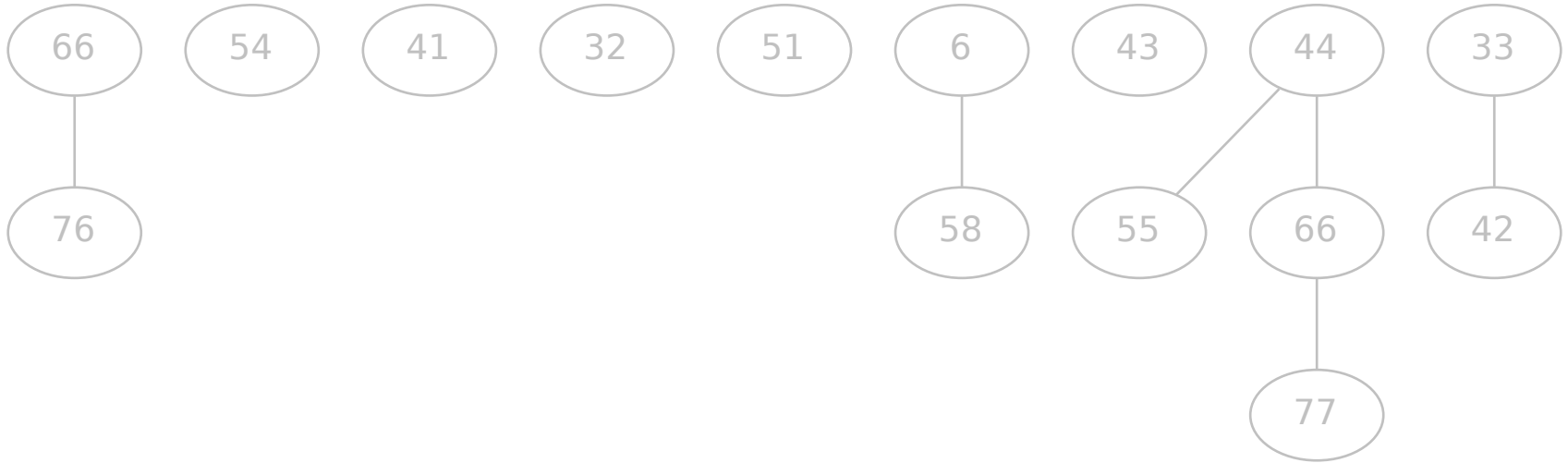
Before executing  
fh\_0001.extractMin()



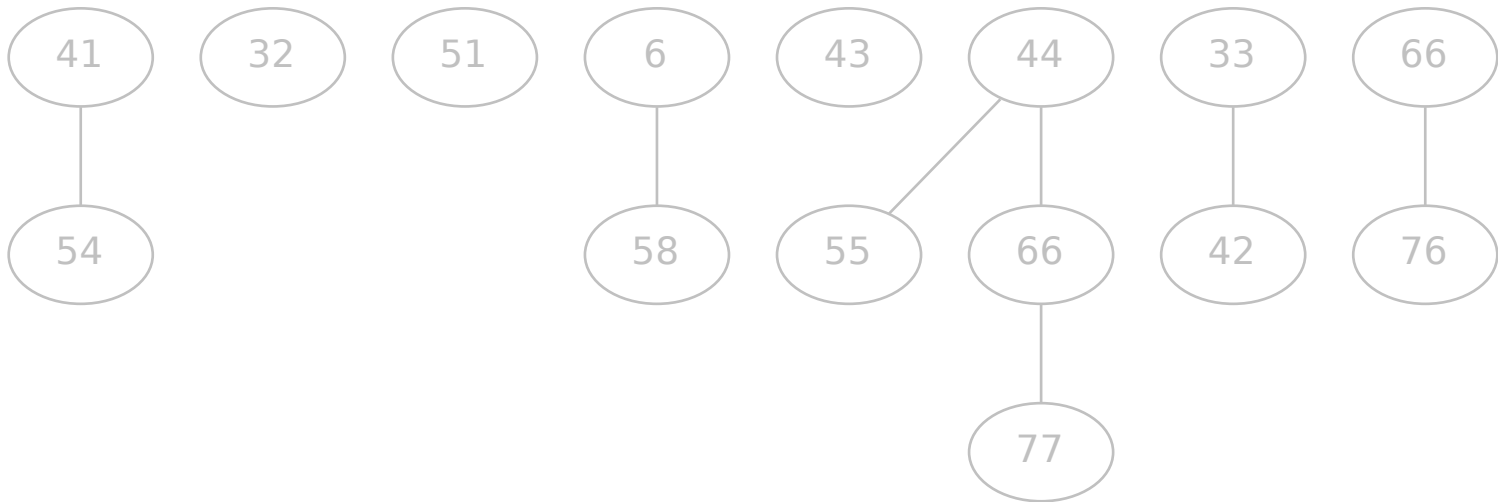


Within the invocation of  
fh\_0001.extractMin() → 3  
Status: removed min node 3

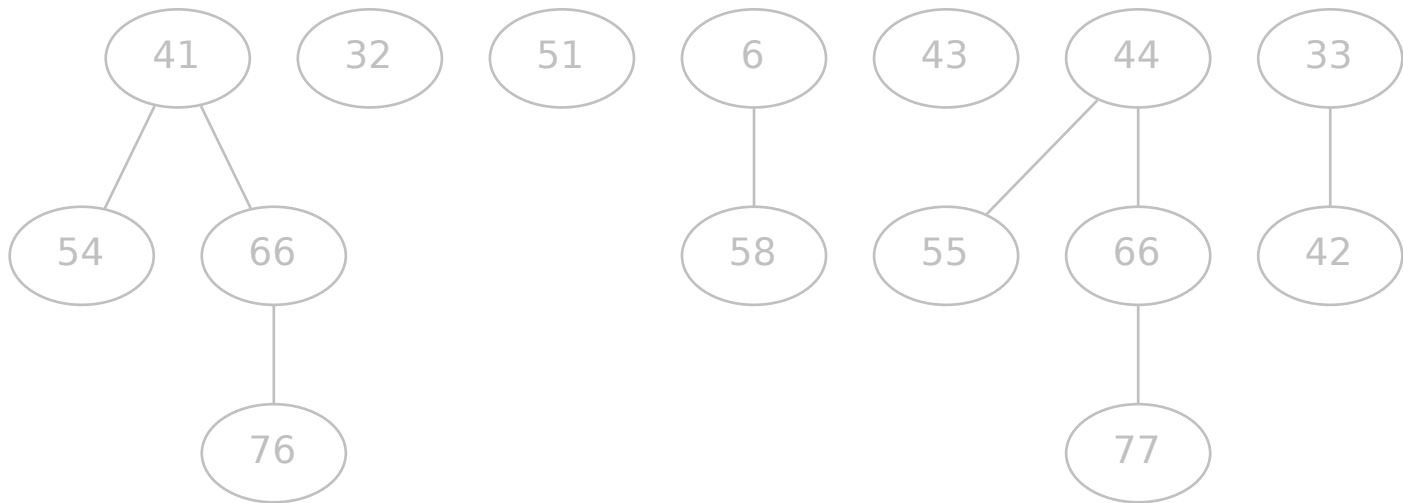




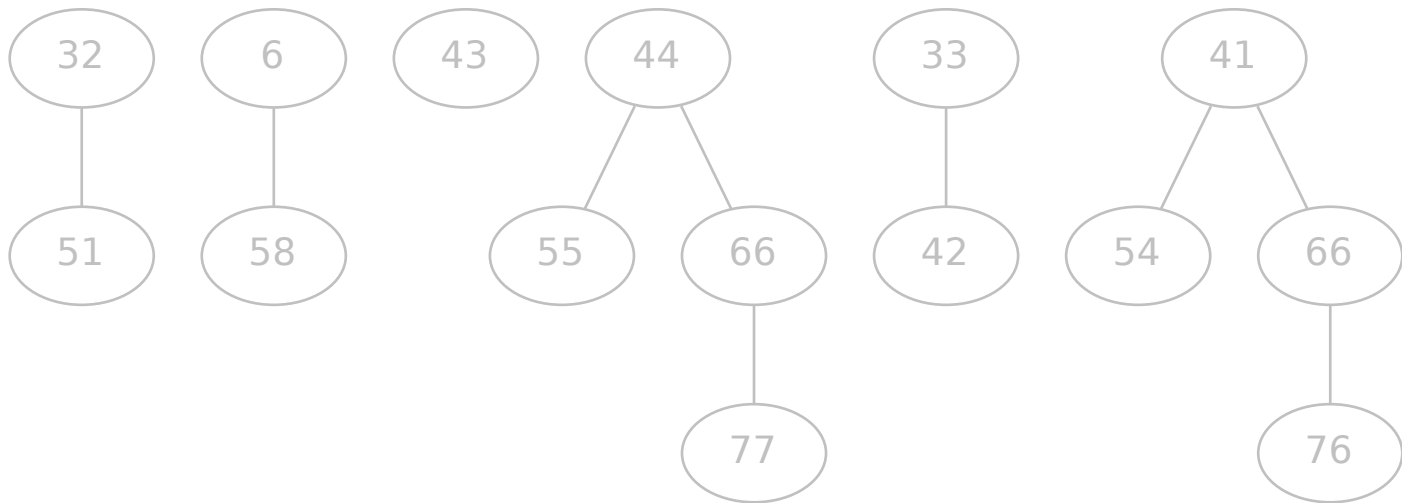
Within the invocation of  
fh\_0001.extractMin() → 3  
Status: did linking step for degree 0



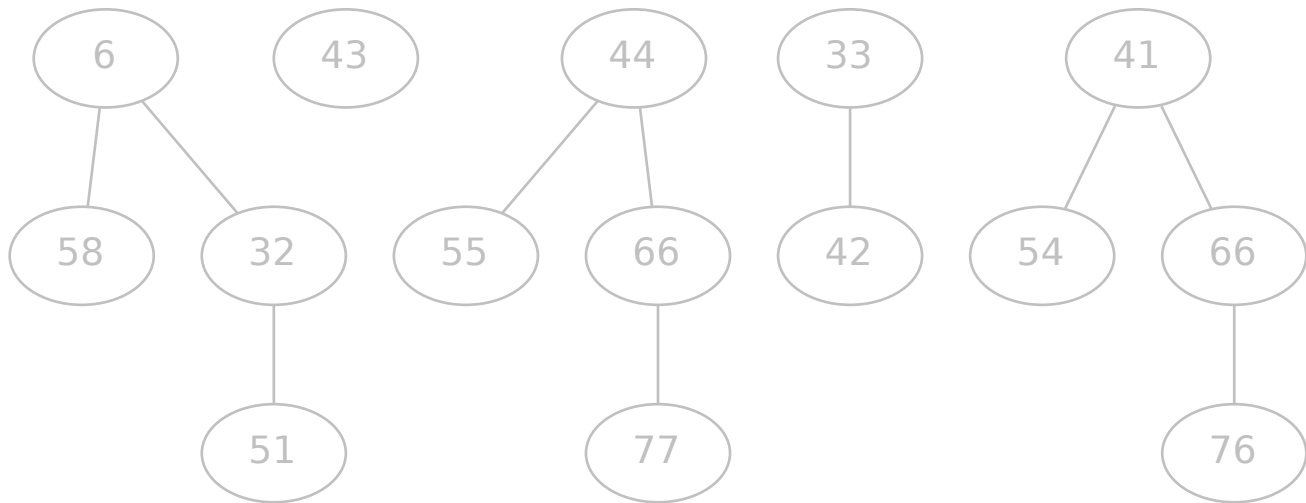
Within the invocation of  
fh\_0001.extractMin() → 3  
Status: did linking step for degree 0



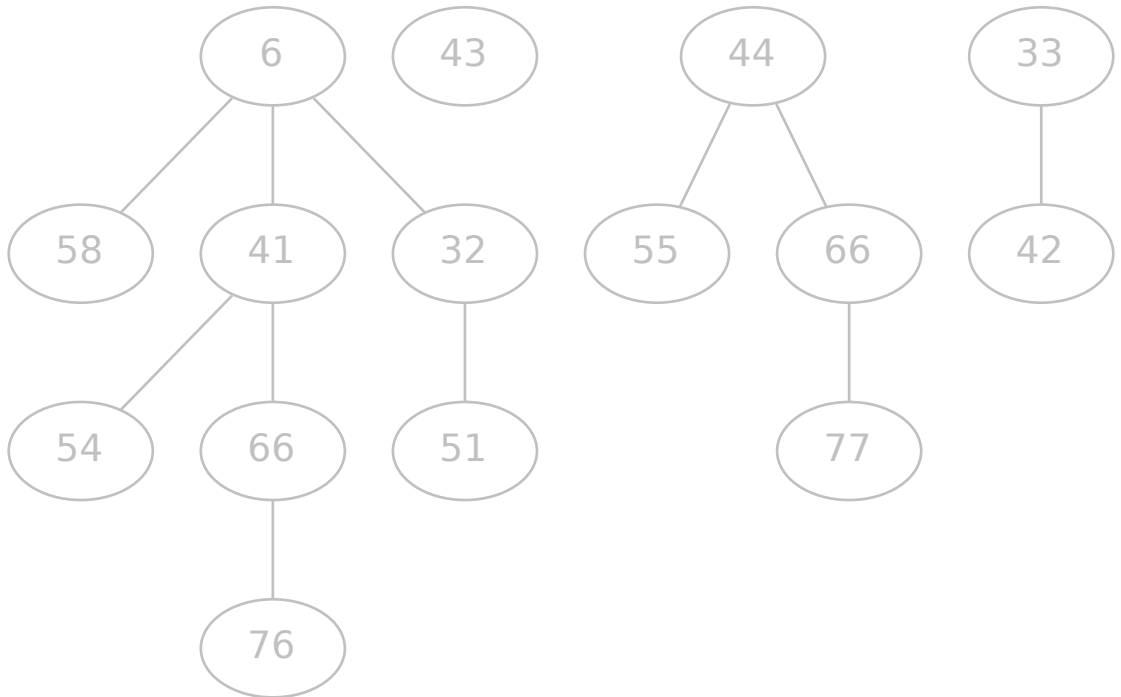
Within the invocation of  
fh\_0001.extractMin() → 3  
Status: did linking step for degree 1



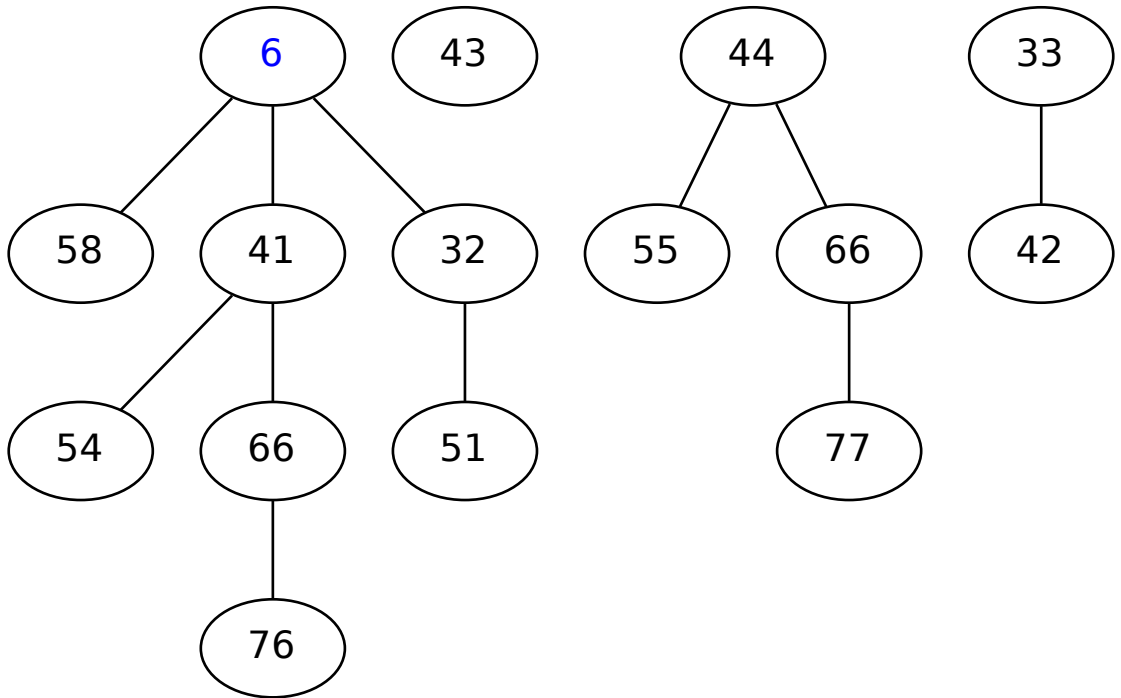
Within the invocation of  
fh\_0001.extractMin() → 3  
Status: did linking step for degree 0



Within the invocation of  
fh\_0001.extractMin() → 3  
Status: did linking step for degree 1

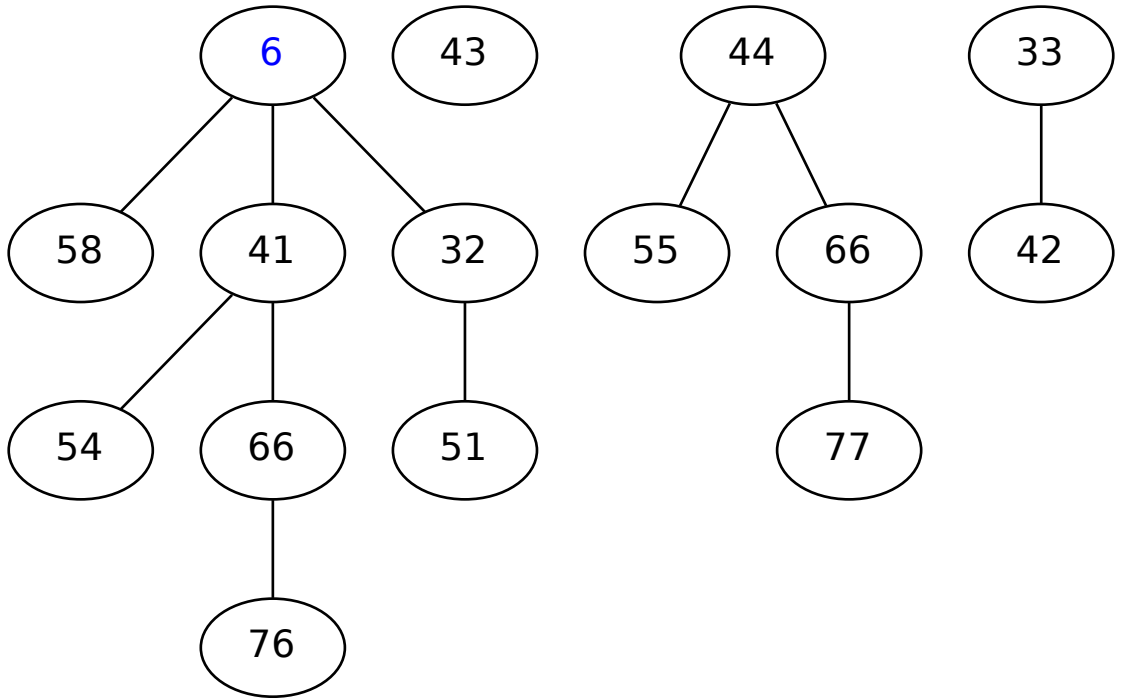


Within the invocation of  
fh\_0001.extractMin() → 3  
Status: did linking step for degree 2

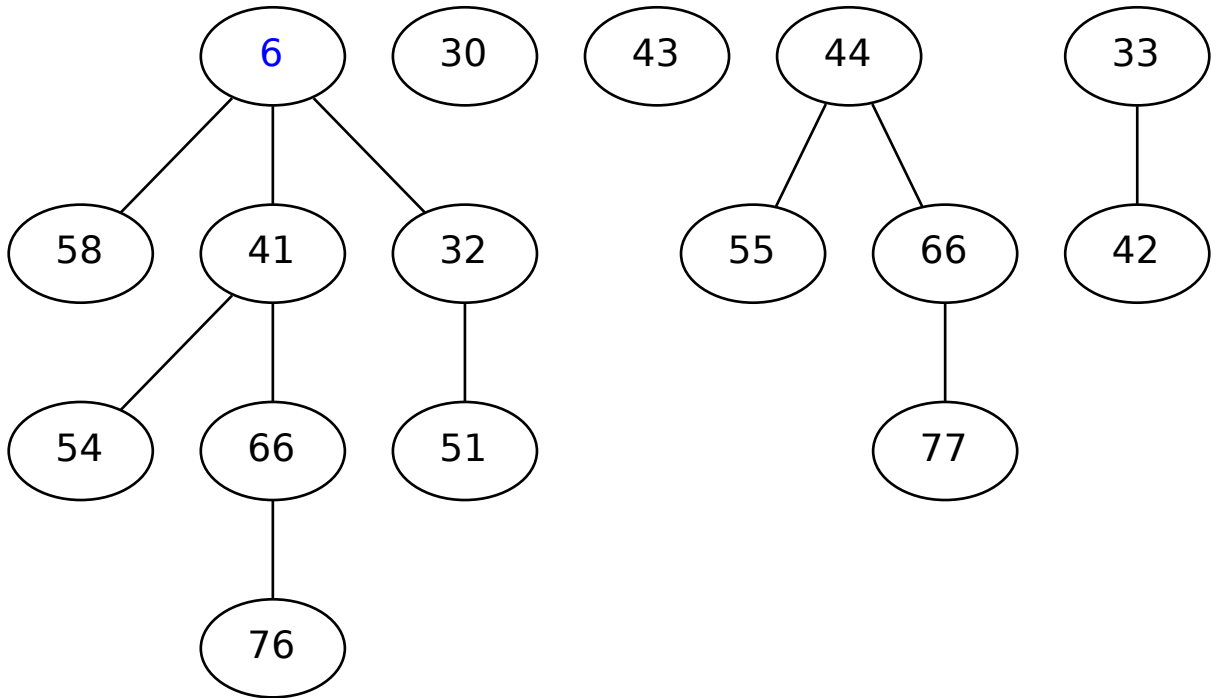


After executing  
fh\_0001.extractMin() → 3

Before executing  
fh\_0001.insert(30)

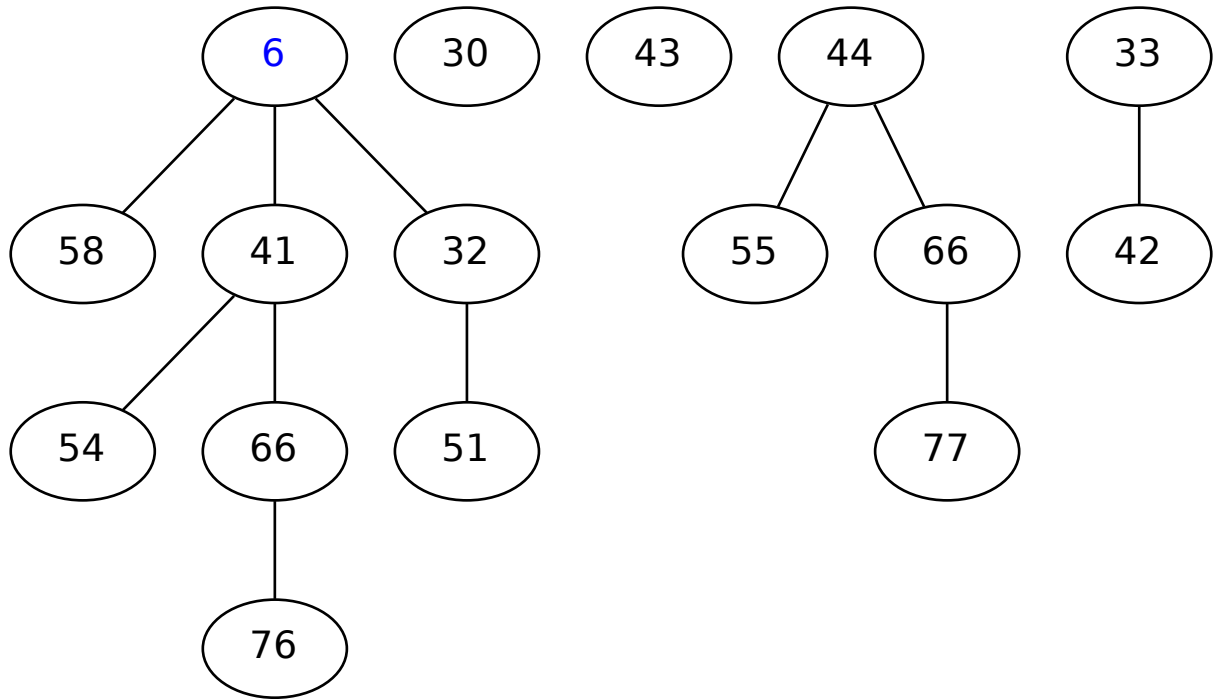


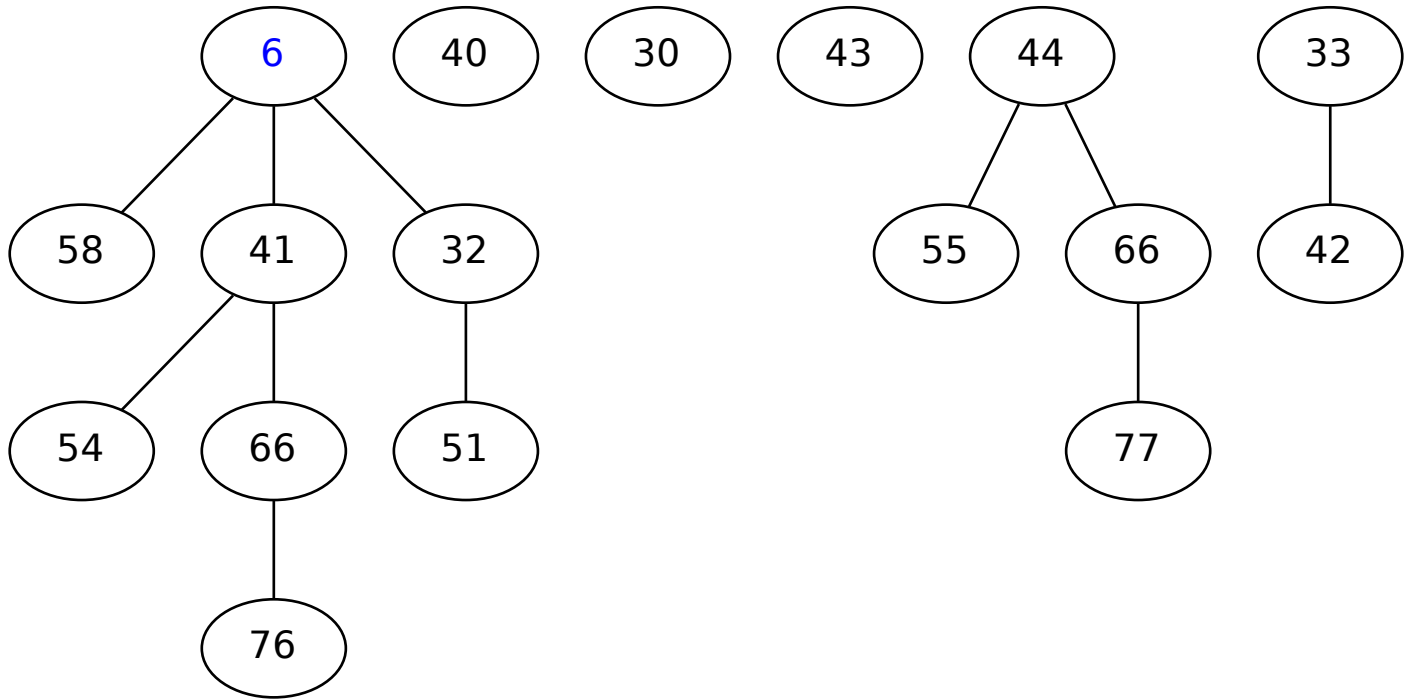




After executing  
fh\_0001.insert(30)

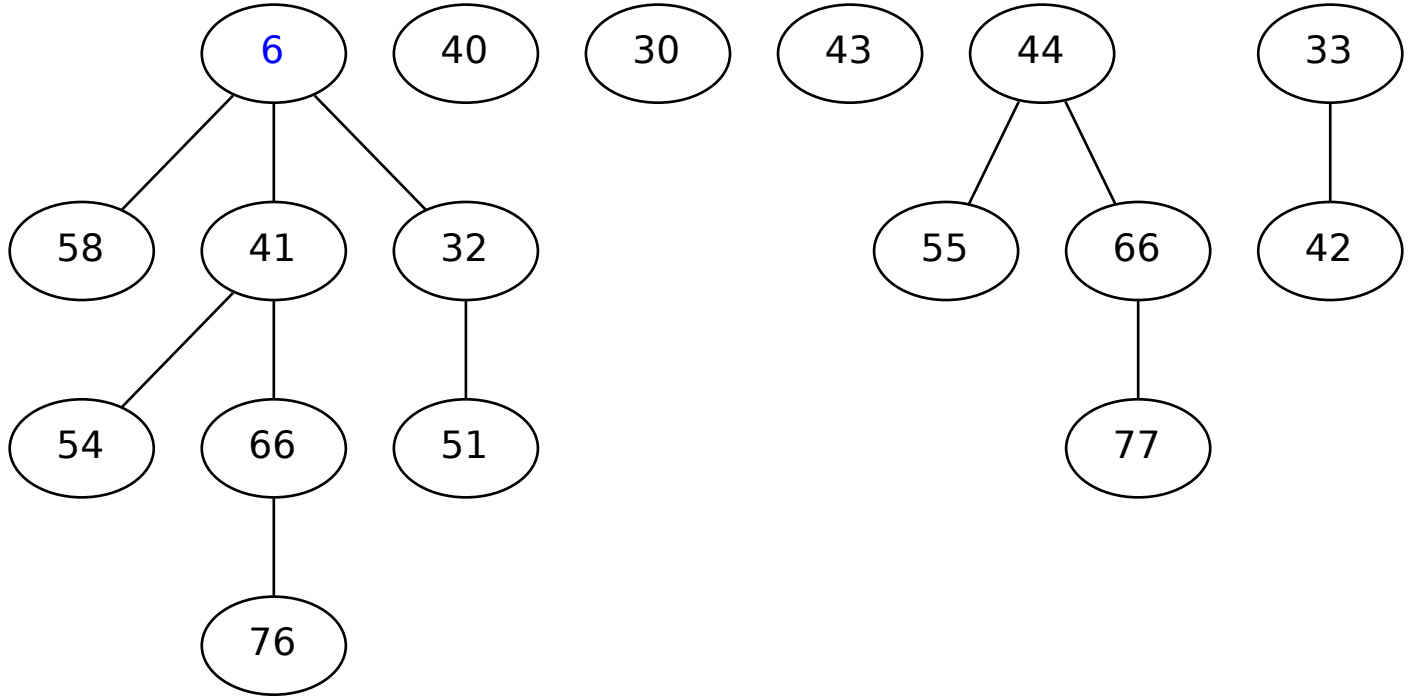
Before executing  
fh\_0001.insert(40)

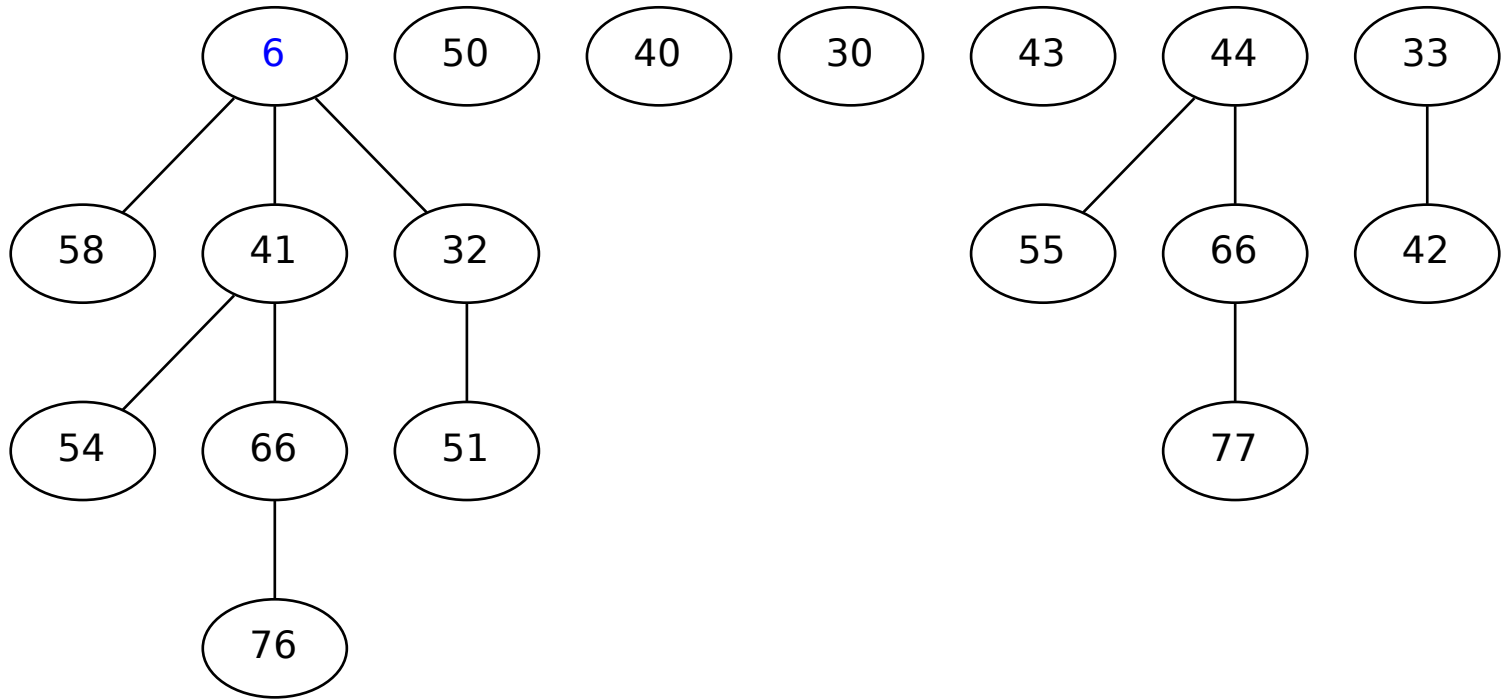




After executing  
fh\_0001.insert(40)

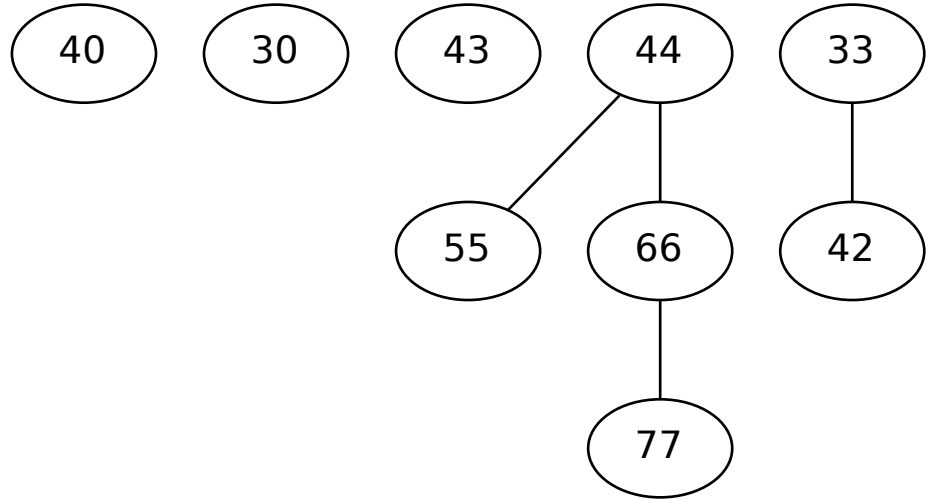
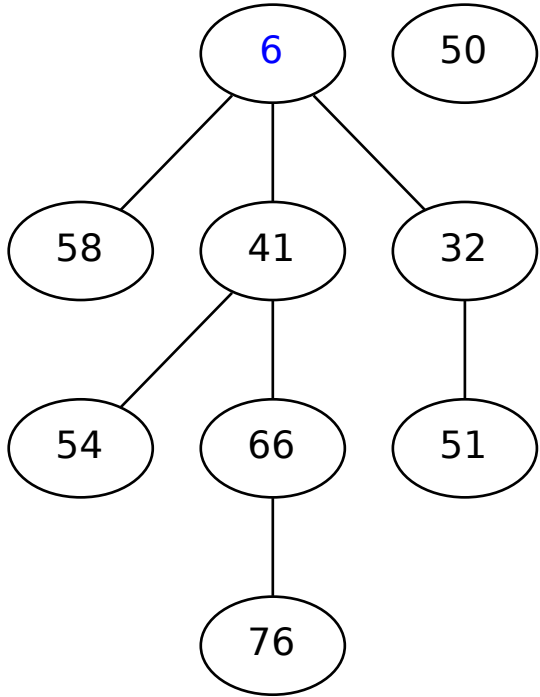
Before executing  
fh\_0001.insert(50)

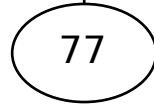
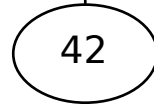
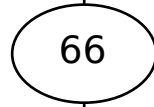
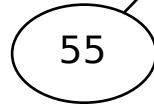
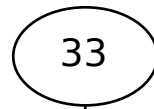
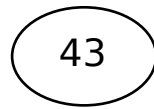
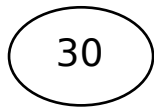
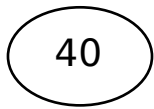
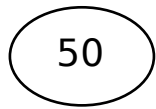
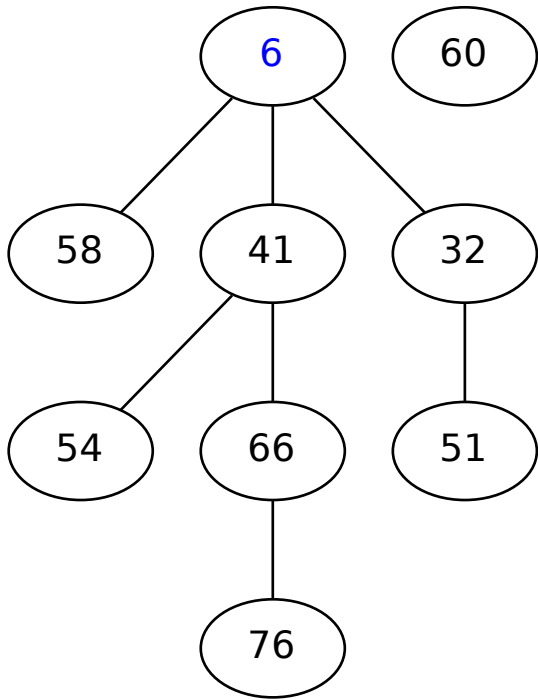




After executing  
fh\_0001.insert(50)

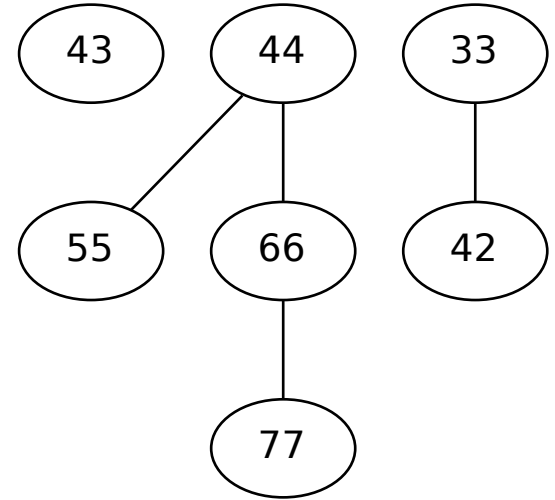
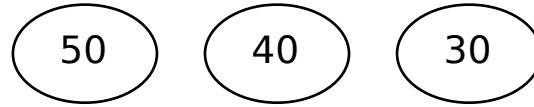
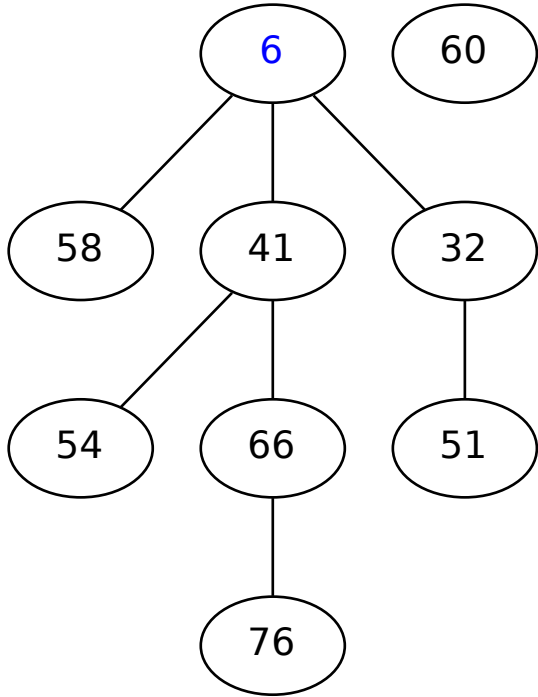
Before executing  
fh\_0001.insert(60)



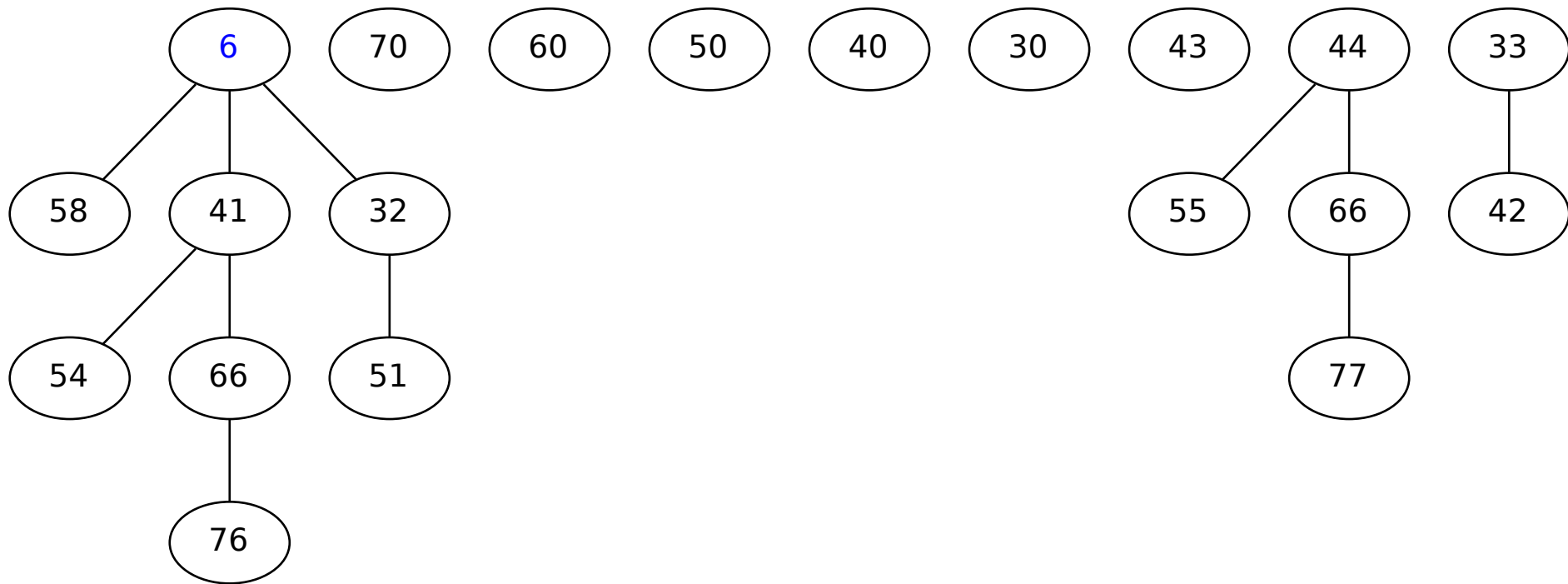


After executing  
fh\_0001.insert(60)

Before executing  
fh\_0001.insert(70)

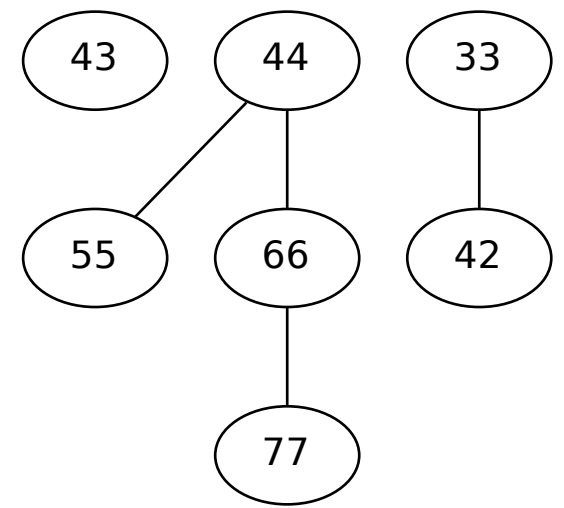
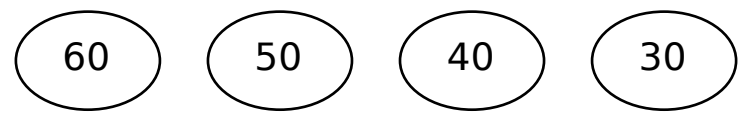
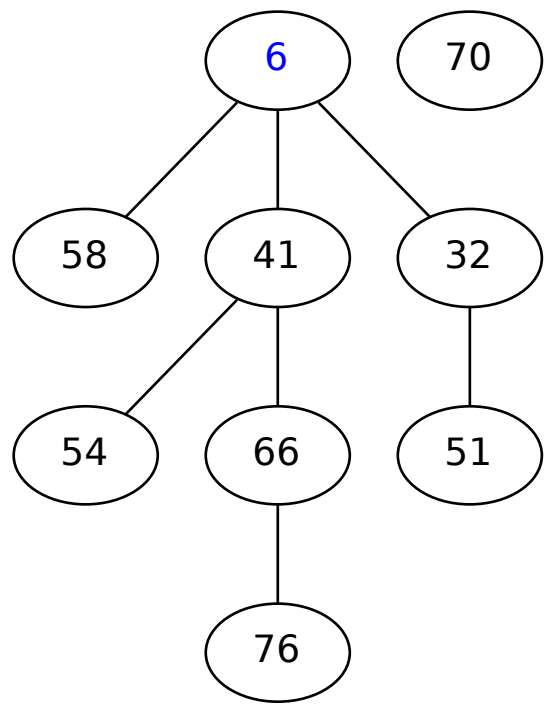


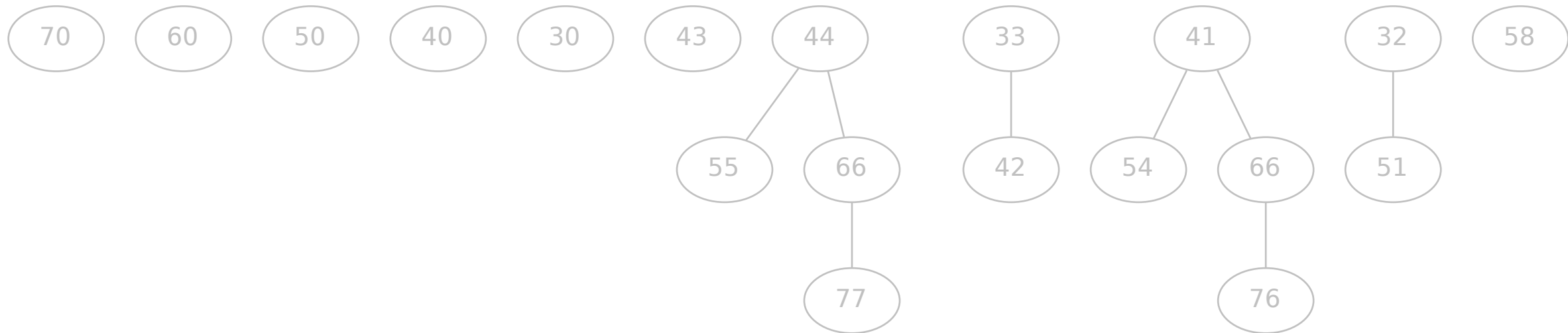




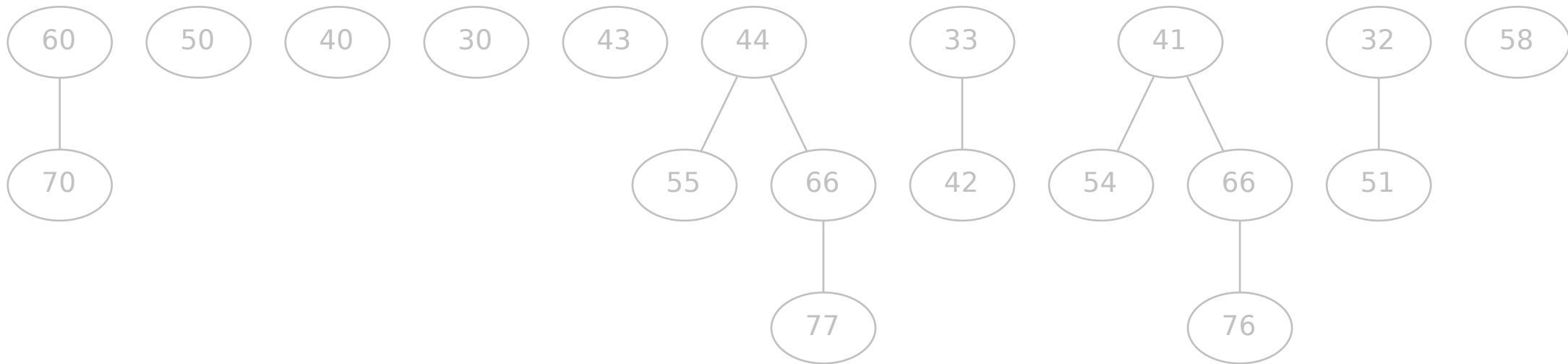
After executing  
fh\_0001.insert(70)

Before executing  
fh\_0001.extractMin()

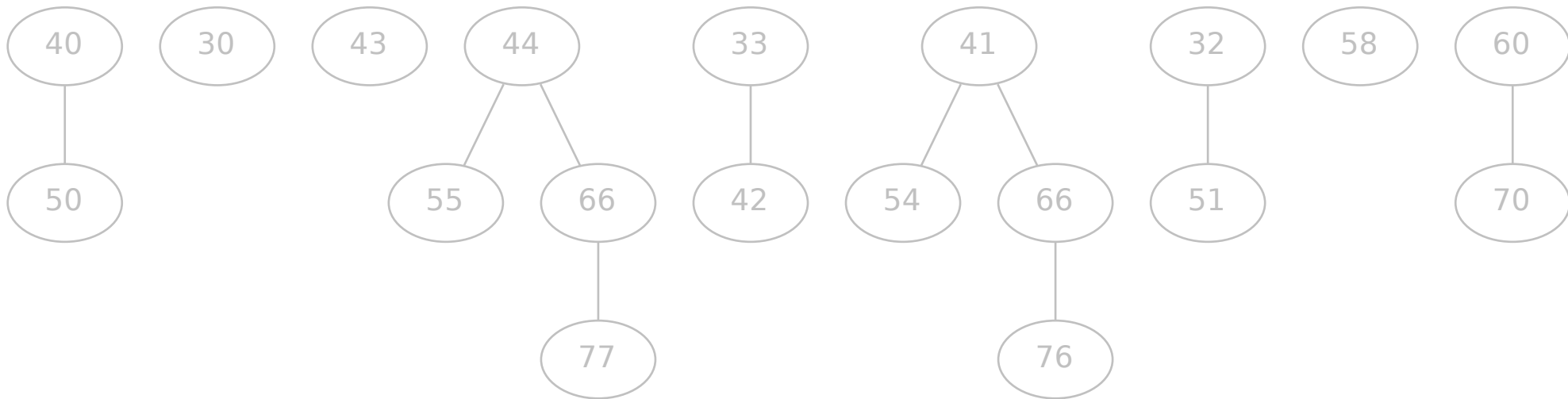




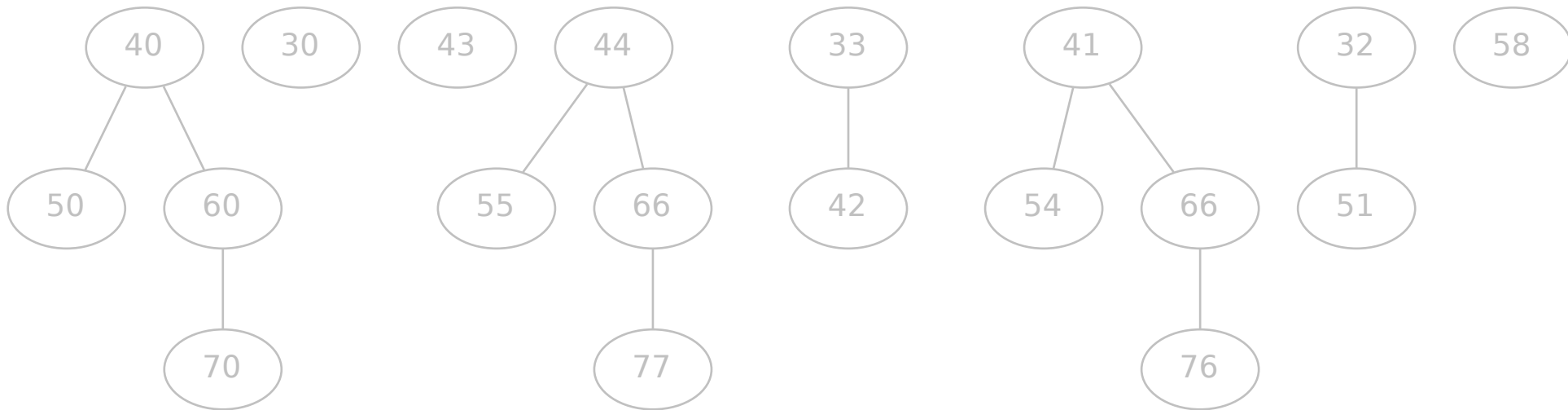
Within the invocation of  
fh\_0001.extractMin() → 6  
Status: removed min node 6



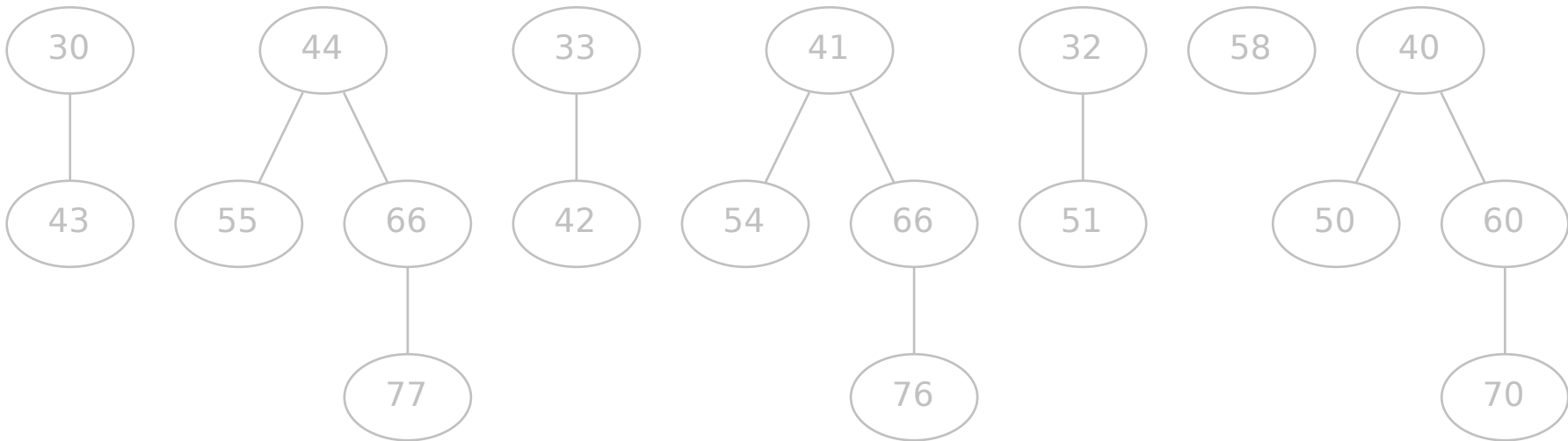
Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 0



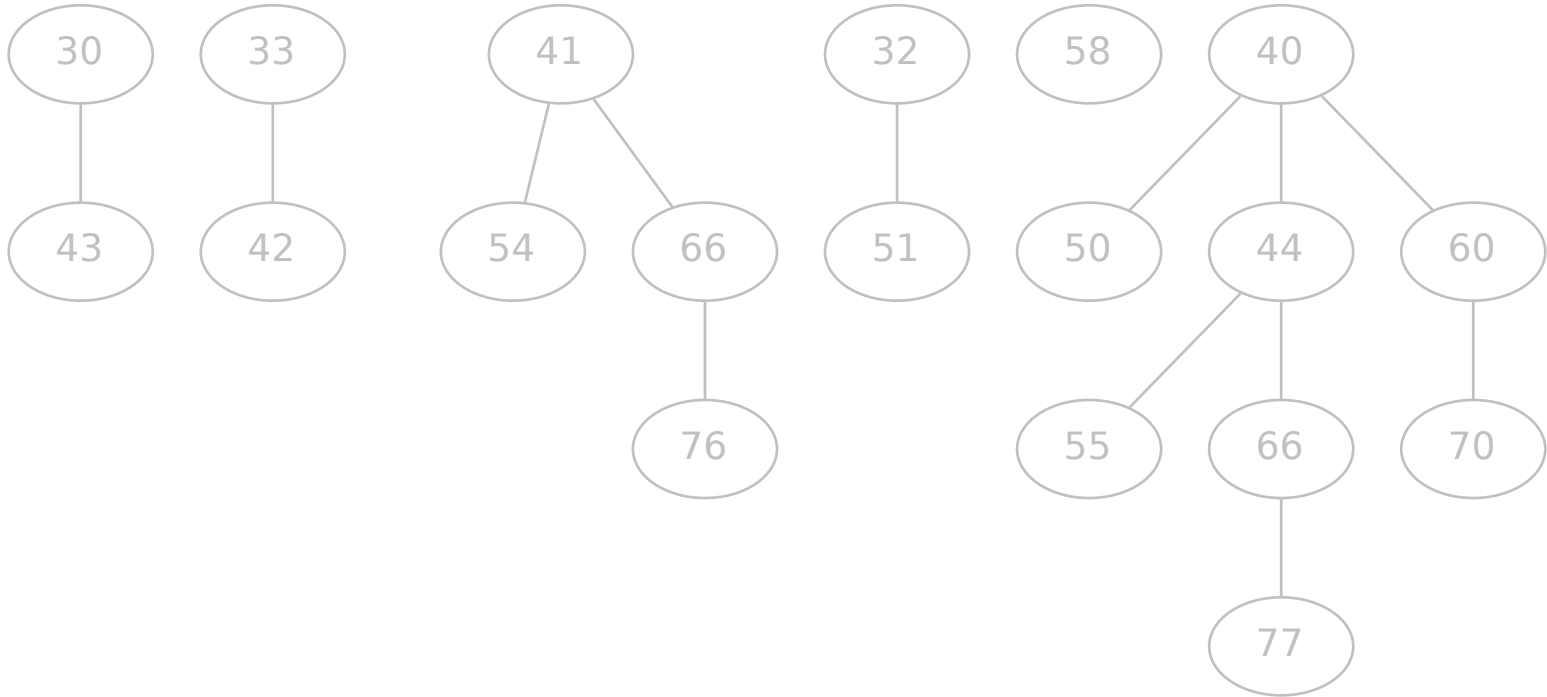
Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 0



Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 1

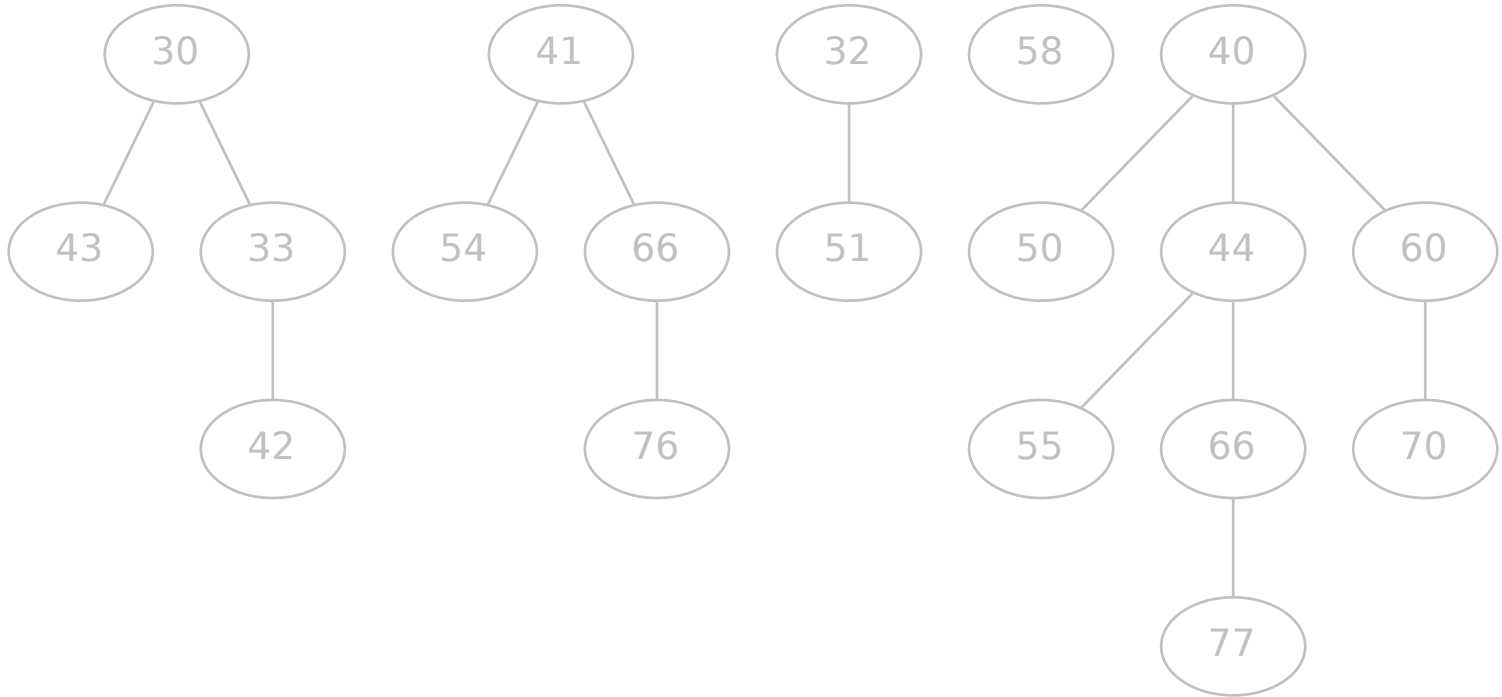


Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 0

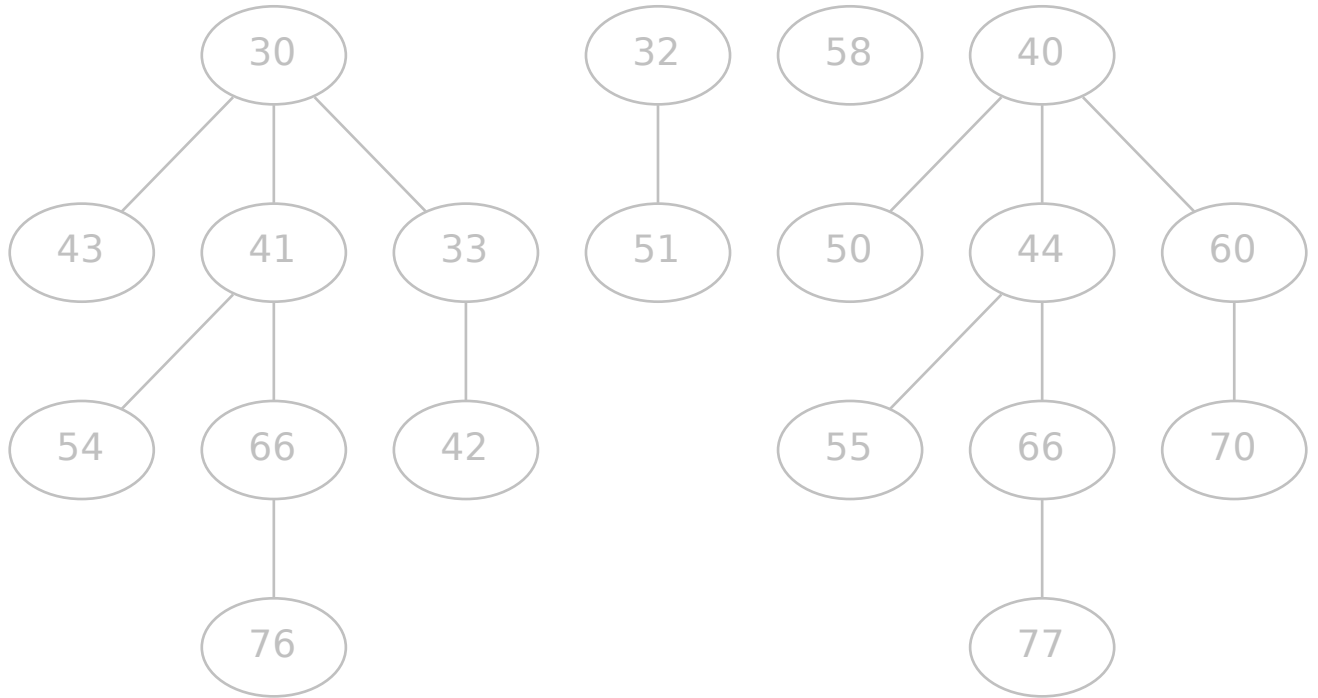


Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 2

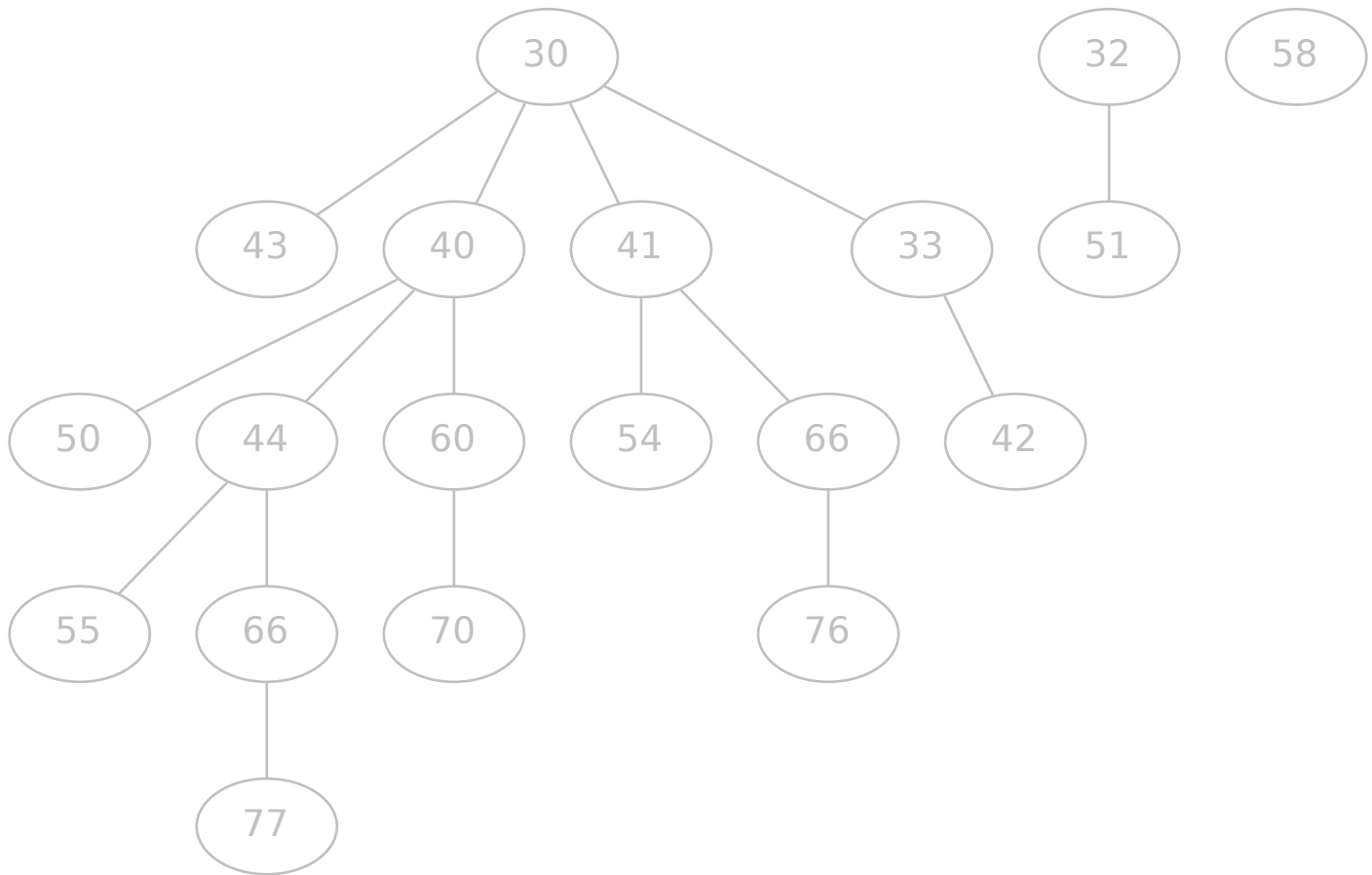




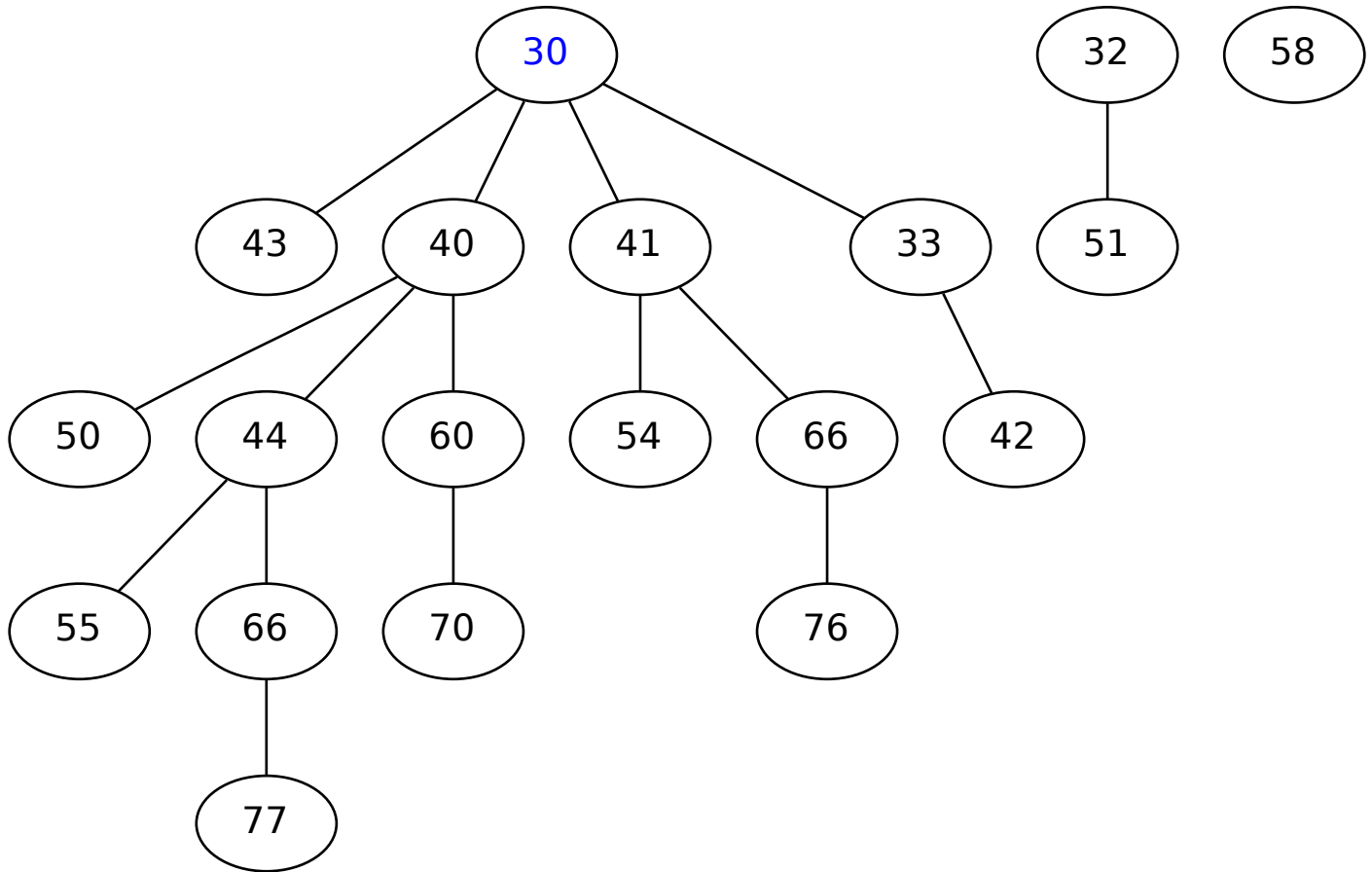
Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 1



Within the invocation of  
`fh_0001.extractMin()` → 6  
Status: did linking step for degree 2

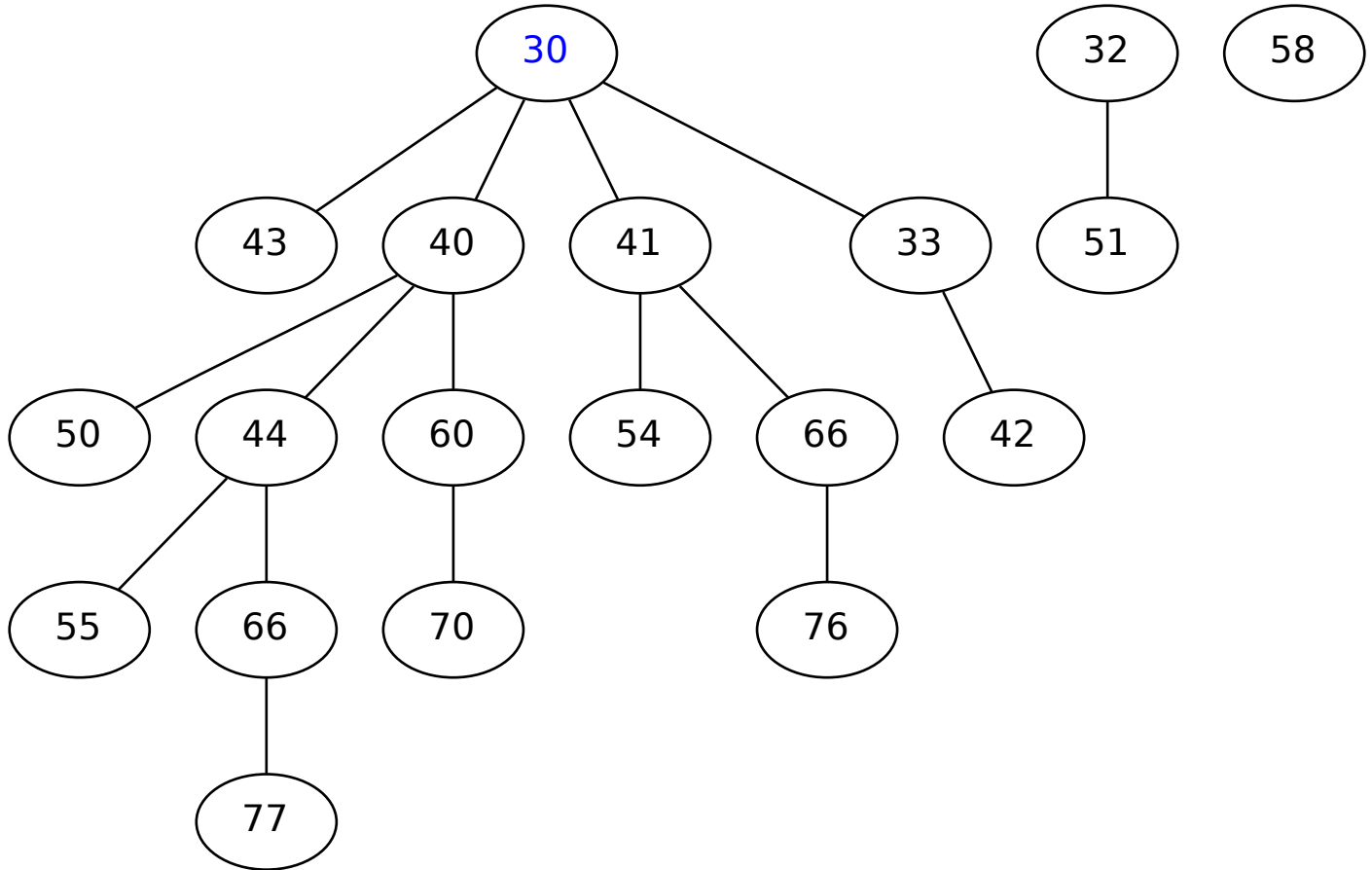


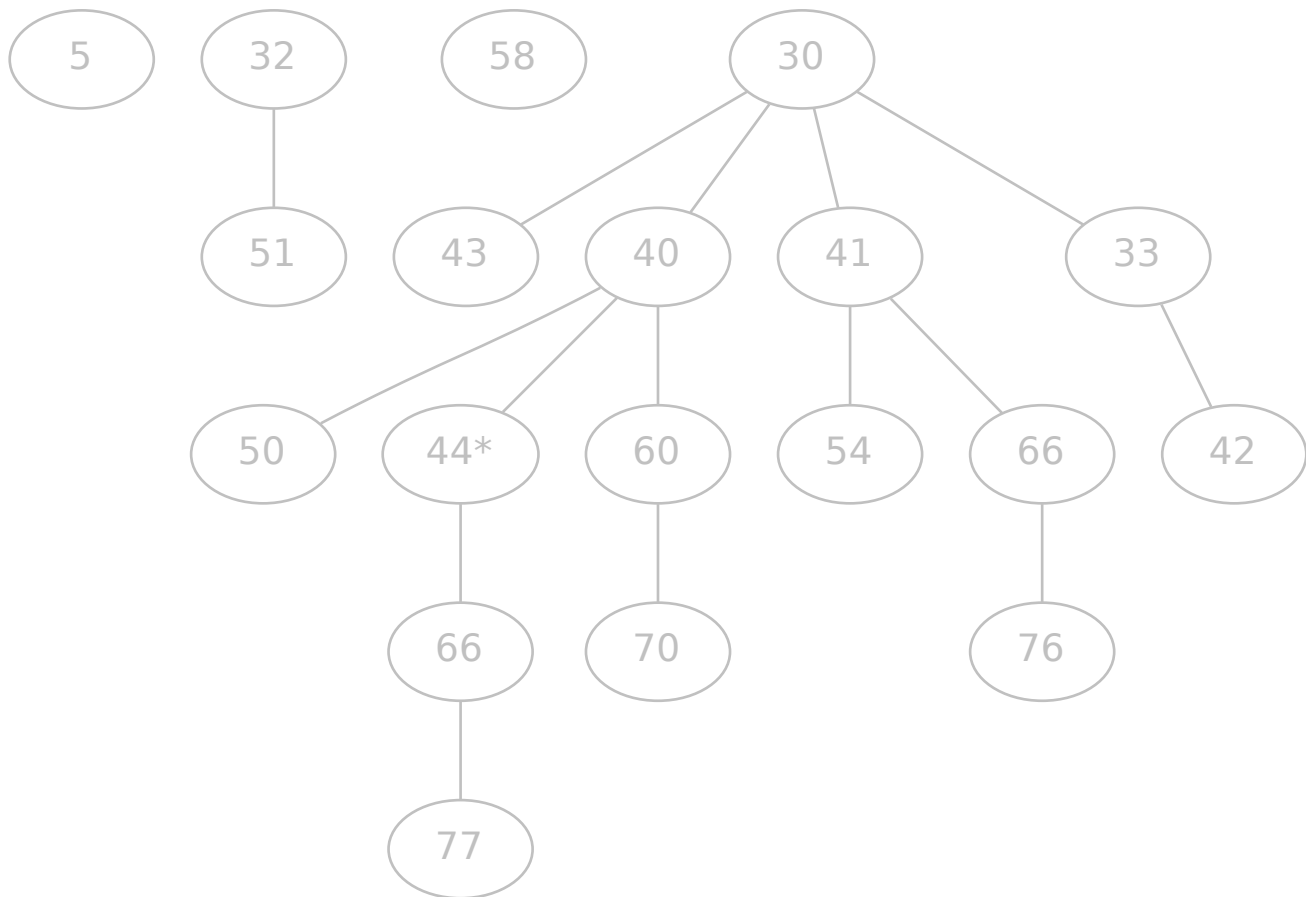
Within the invocation of  
fh\_0001.extractMin() → 6  
Status: did linking step for degree 3



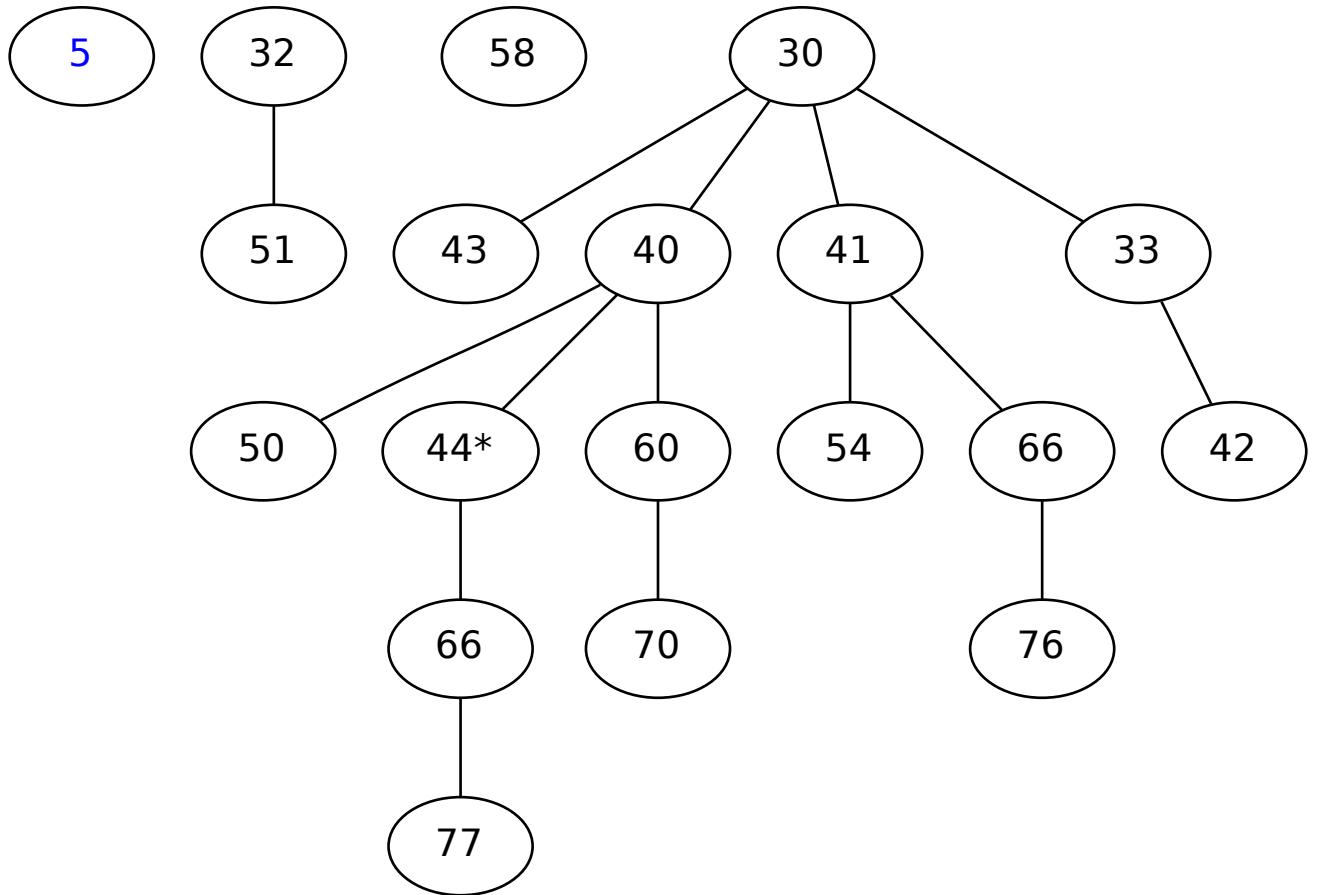
After executing  
fh\_0001.extractMin() → 6

Before executing  
fh\_0001.decreaseKey(55, 50)



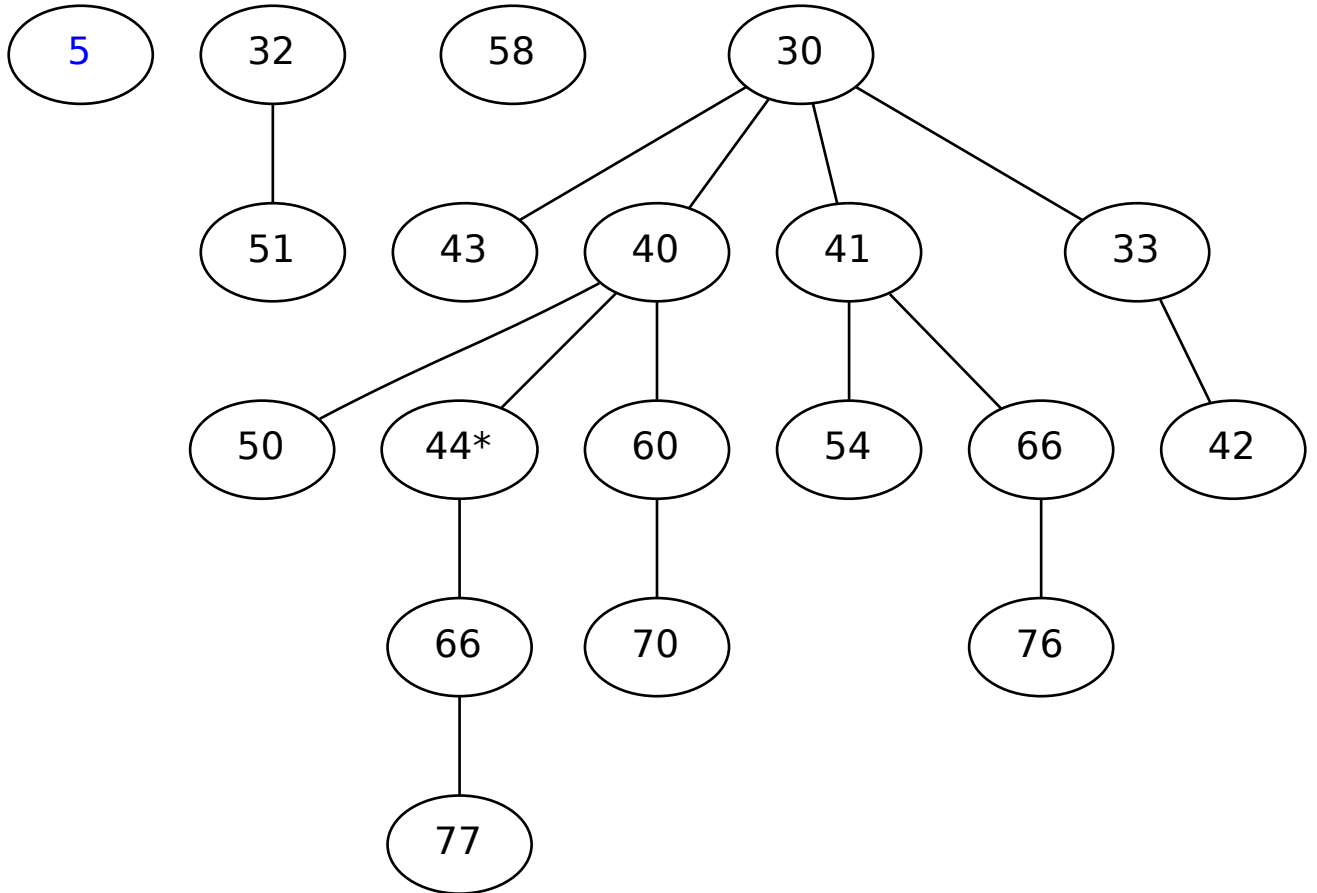


Within the invocation of  
 fh\_0001.decreaseKey(55, 50)  
 Status: spliced out 55 (now 5) and made it a root

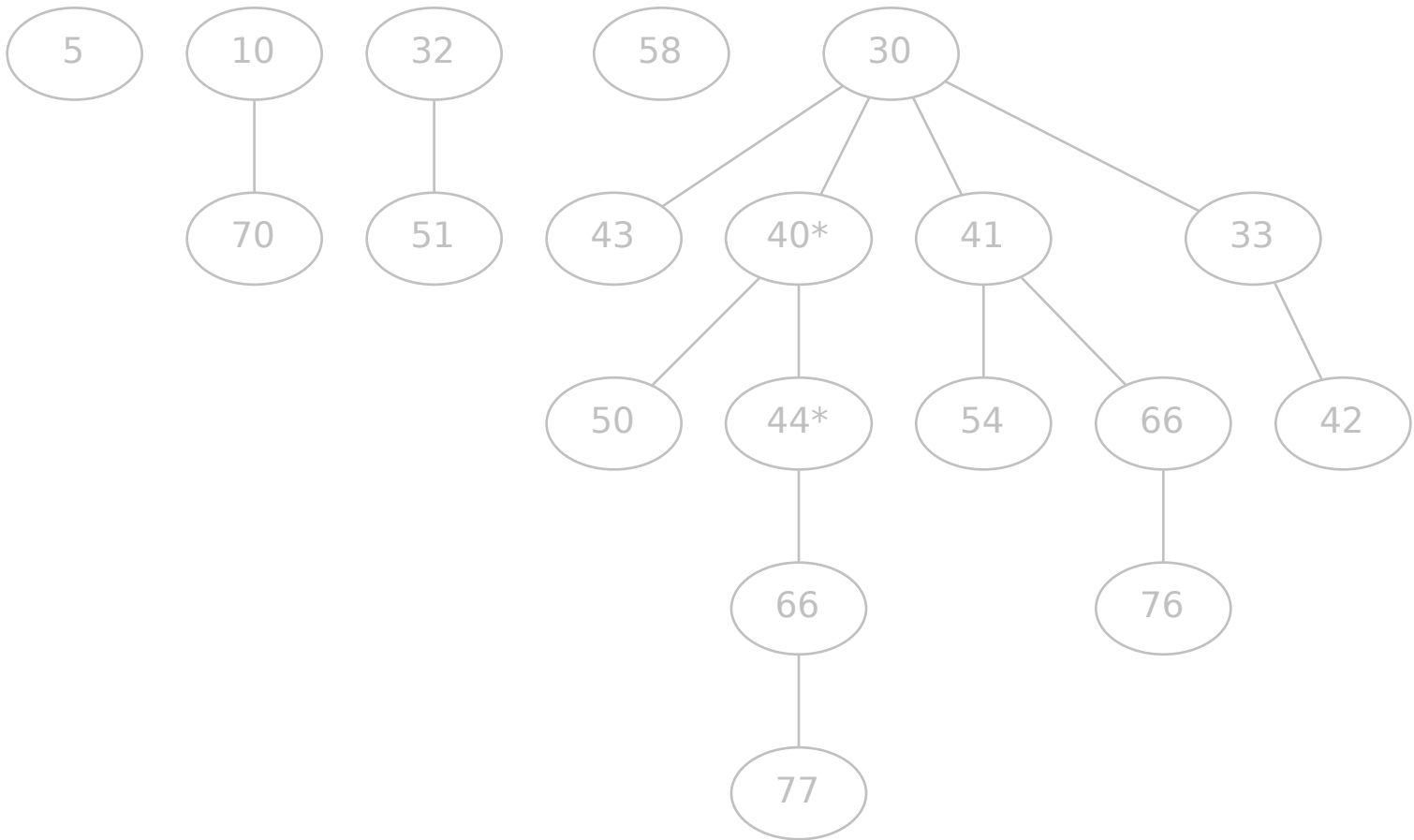


After executing  
`fh_0001.decreaseKey(55, 50)`

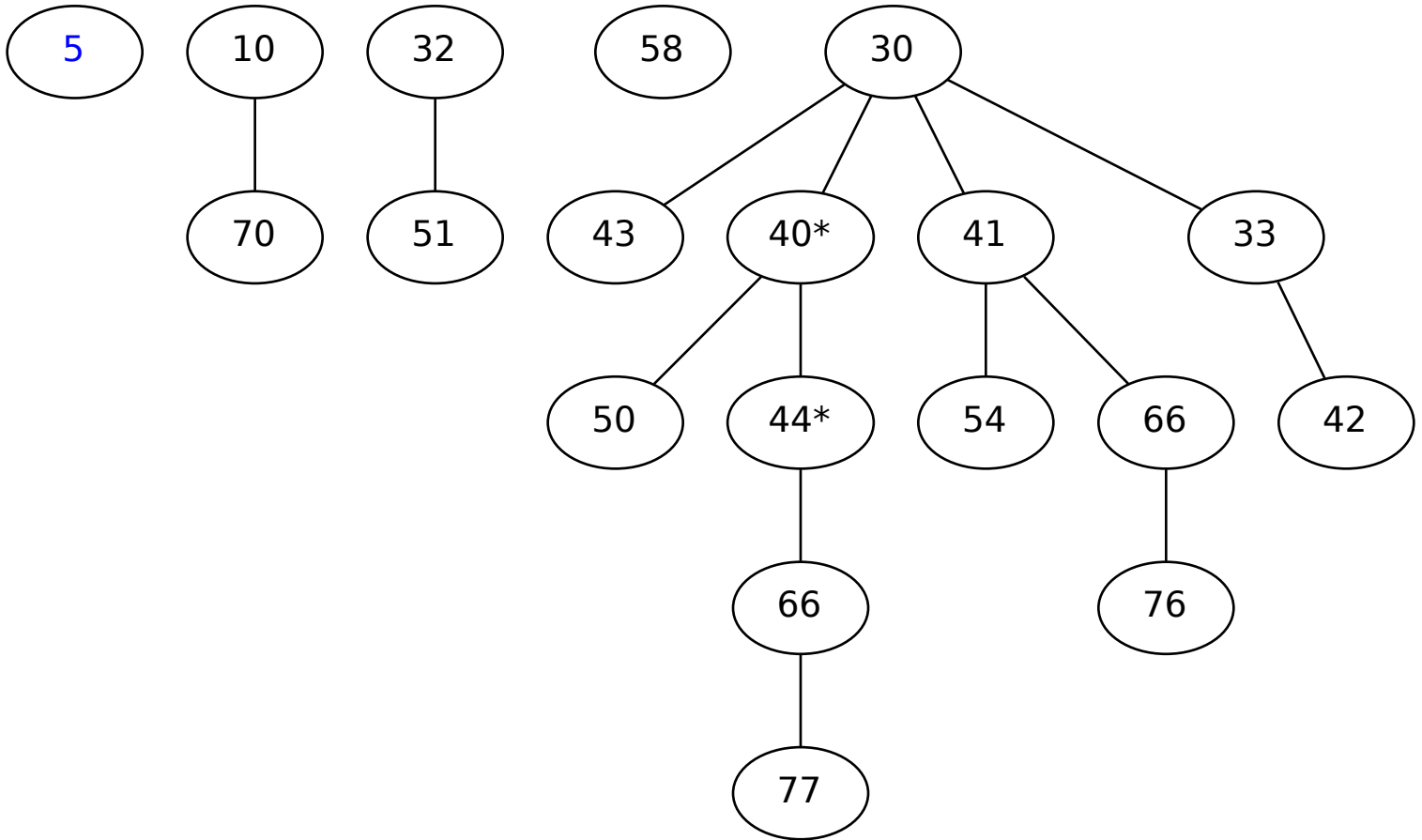
Before executing  
fh\_0001.decreaseKey(60, 50)





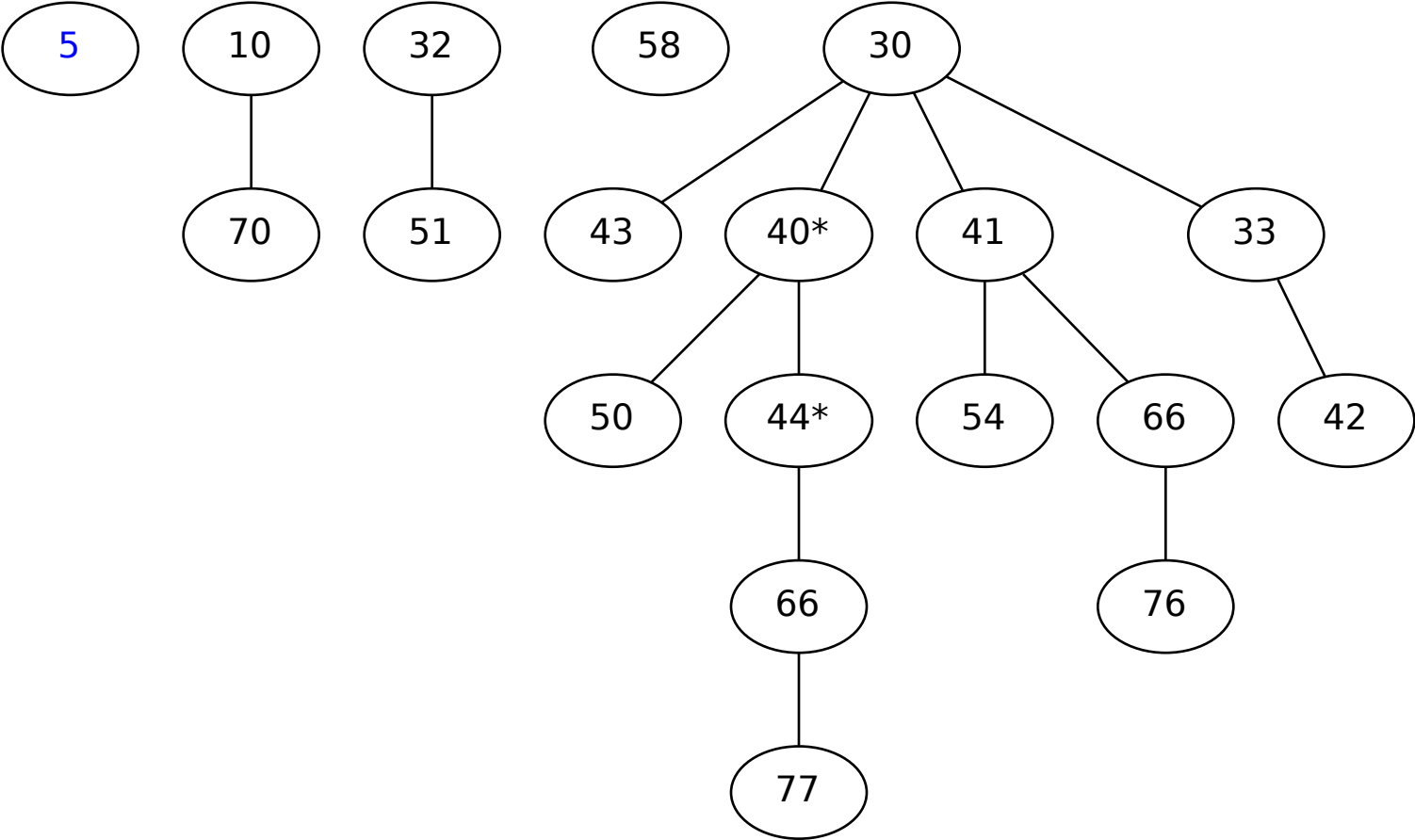


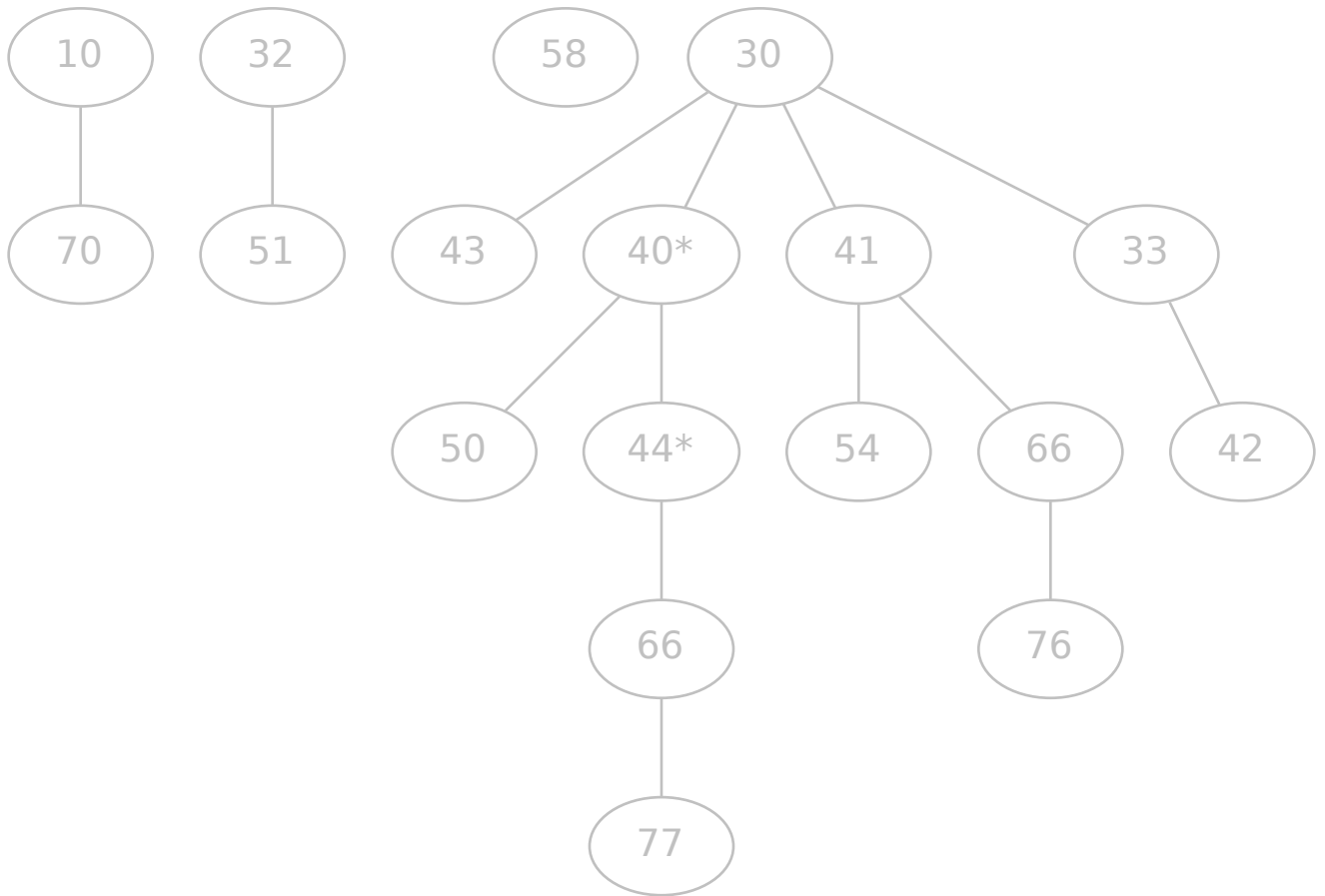
Within the invocation of  
`fh_0001.decreaseKey(60, 50)`  
 Status: spliced out 60 (now 10) and made it a root



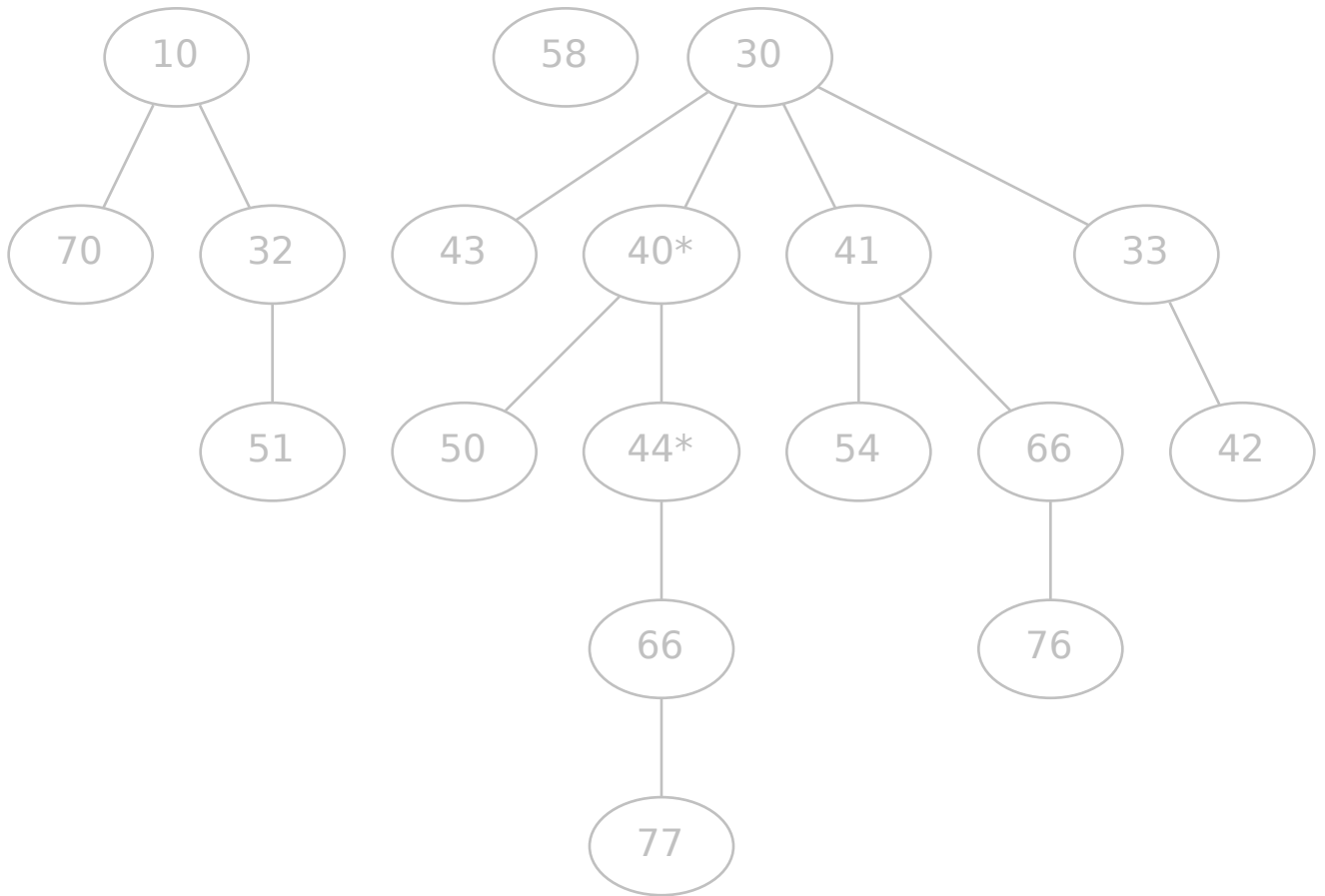
After executing  
`fh_0001.decreaseKey(60, 50)`

Before executing  
fh\_0001.extractMin()

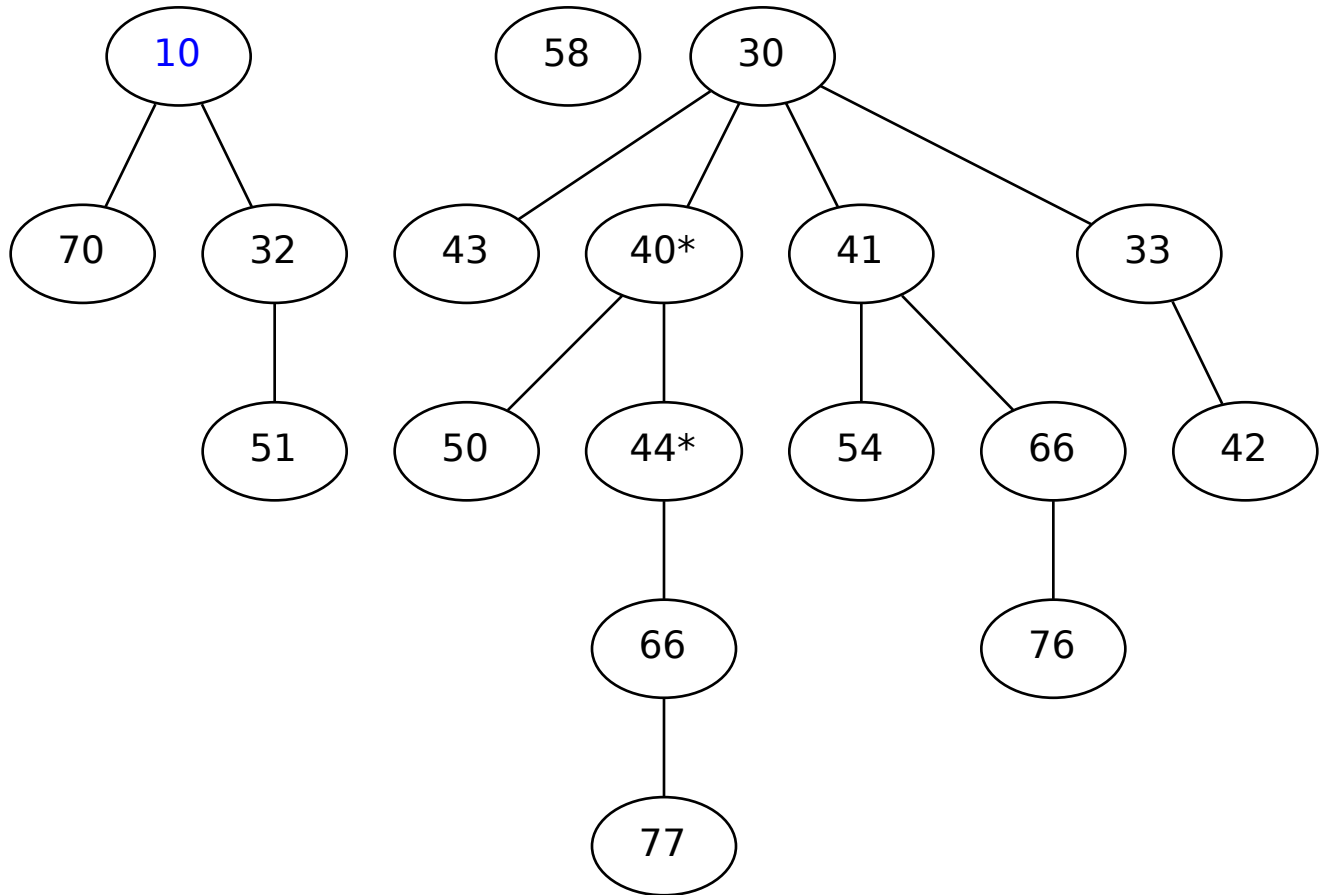




Within the invocation of  
`fh_0001.extractMin()` → 5  
 Status: removed min node 5

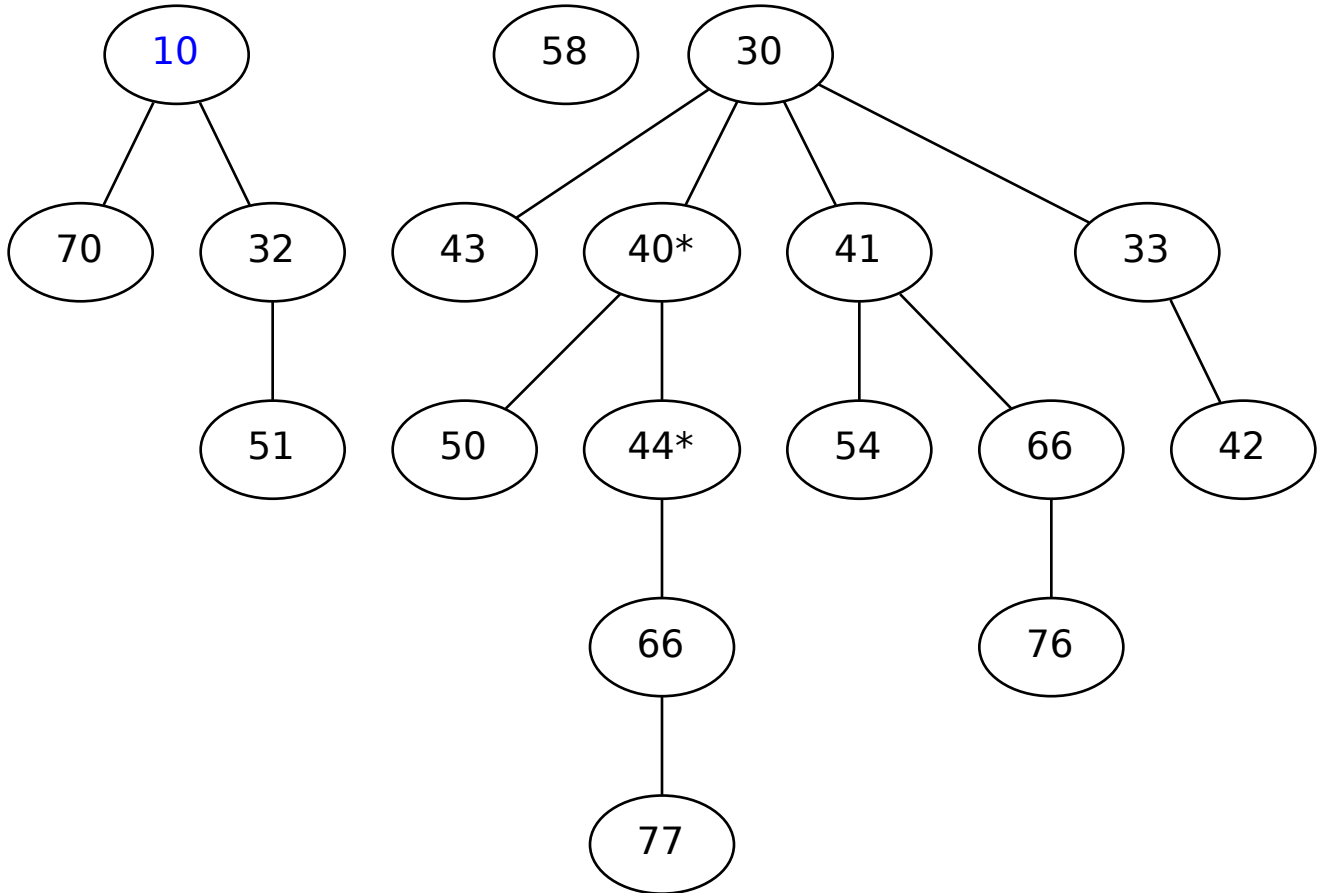


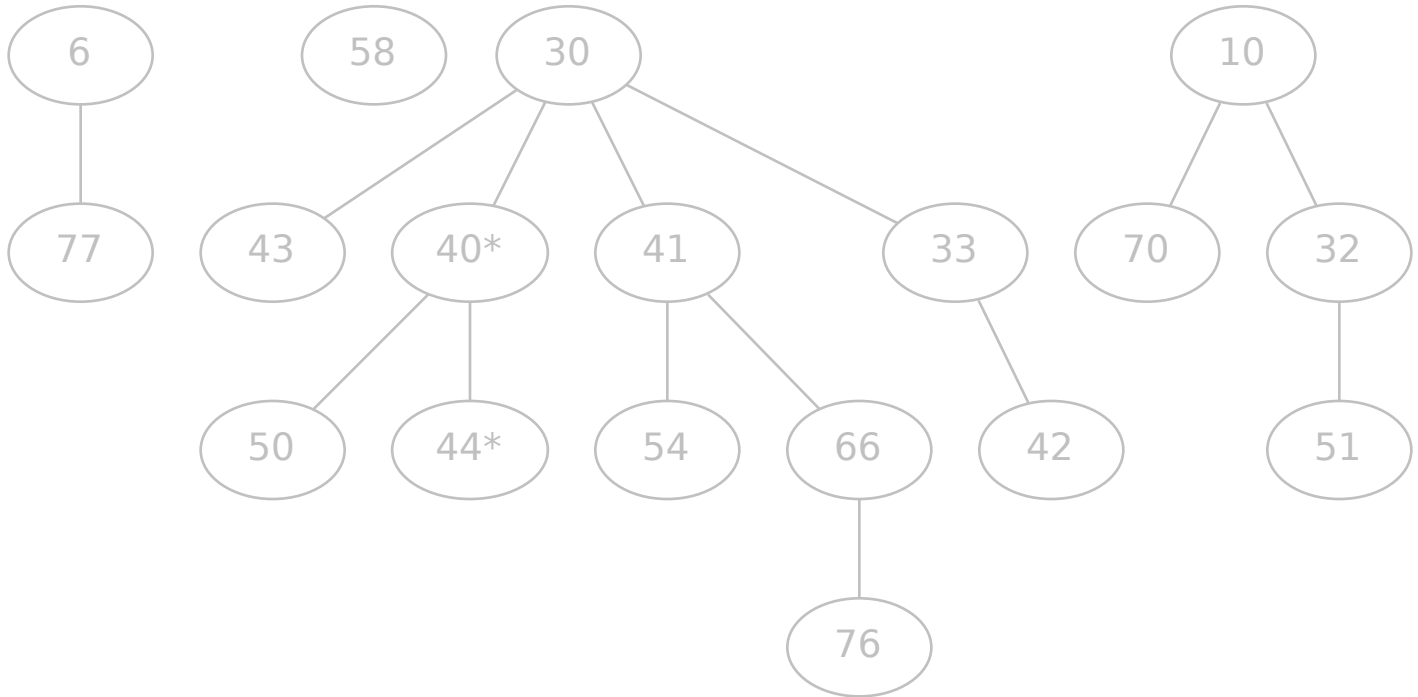
Within the invocation of  
`fh_0001.extractMin()` → 5  
 Status: did linking step for degree 1



After executing  
fh\_0001.extractMin() → 5

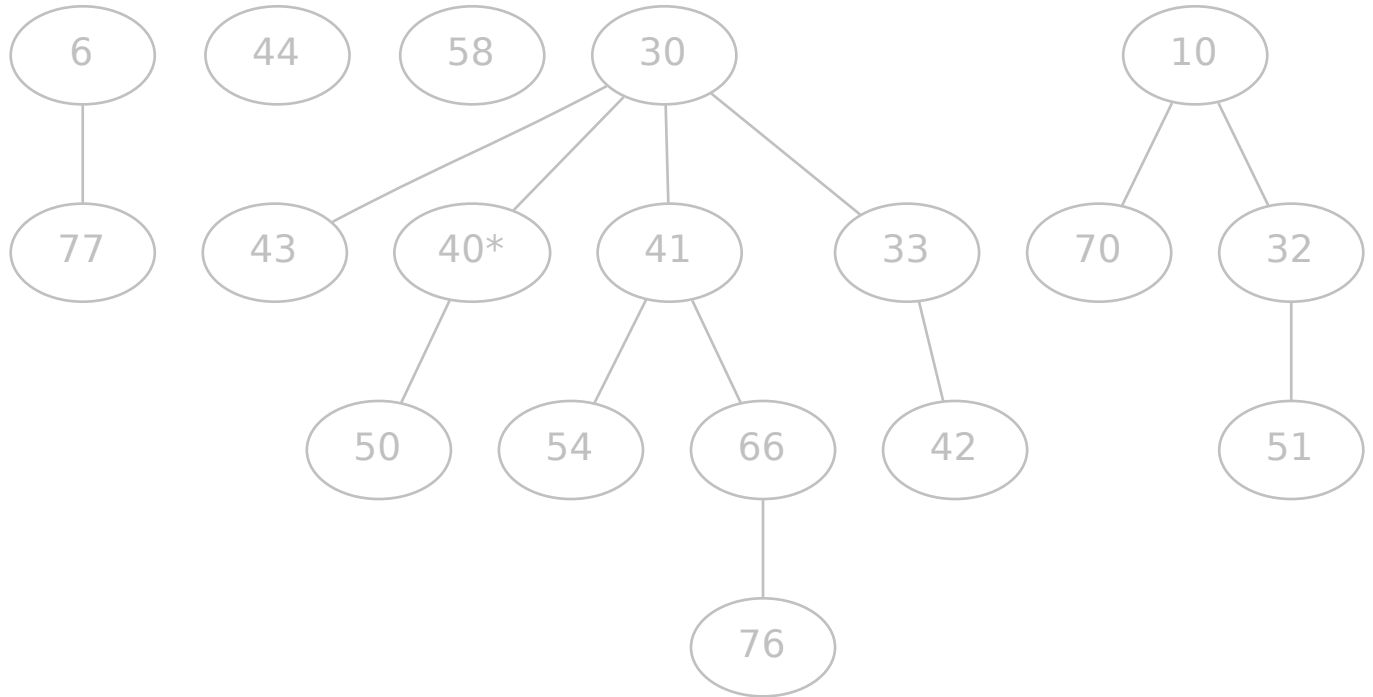
Before executing  
fh\_0001.decreaseKey(66, 60)



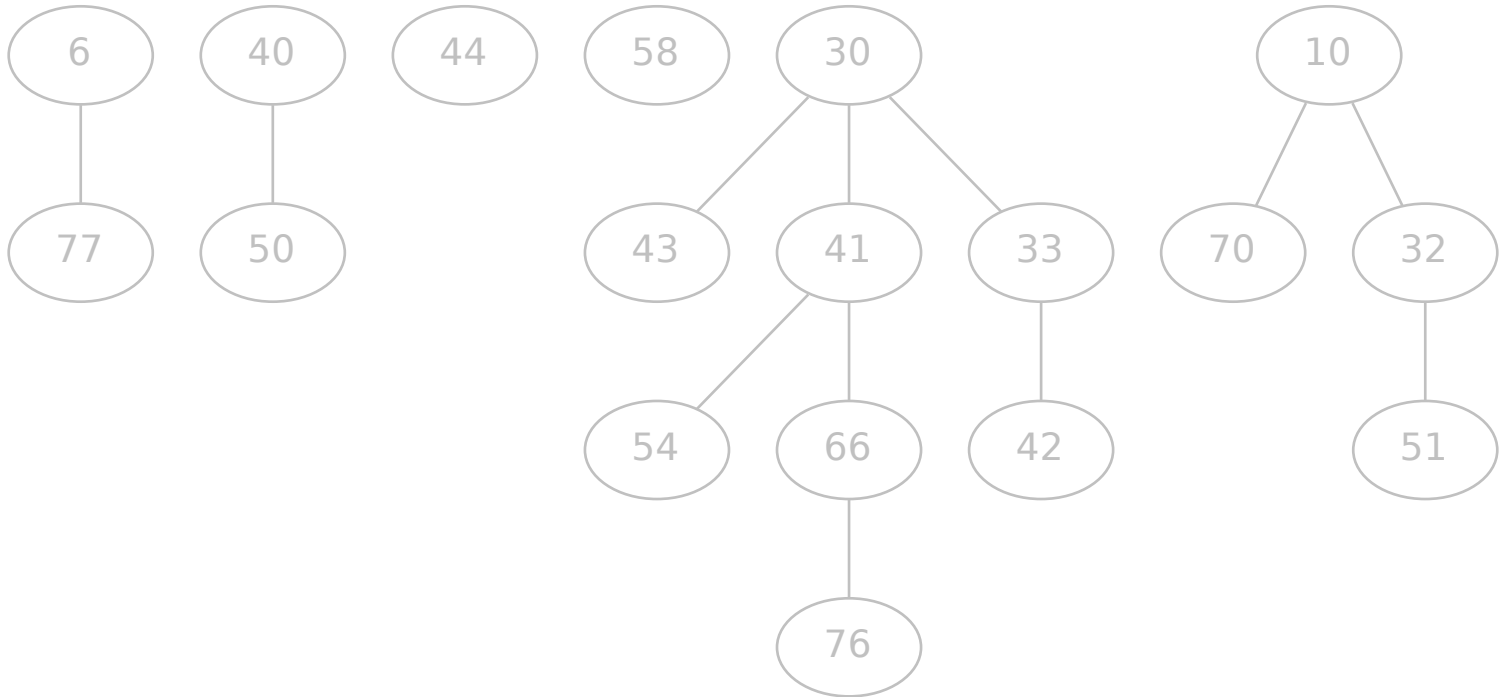


Within the invocation of  
fh\_0001.decreaseKey(66, 60)  
Status: spliced out 66 (now 6) and made it a root

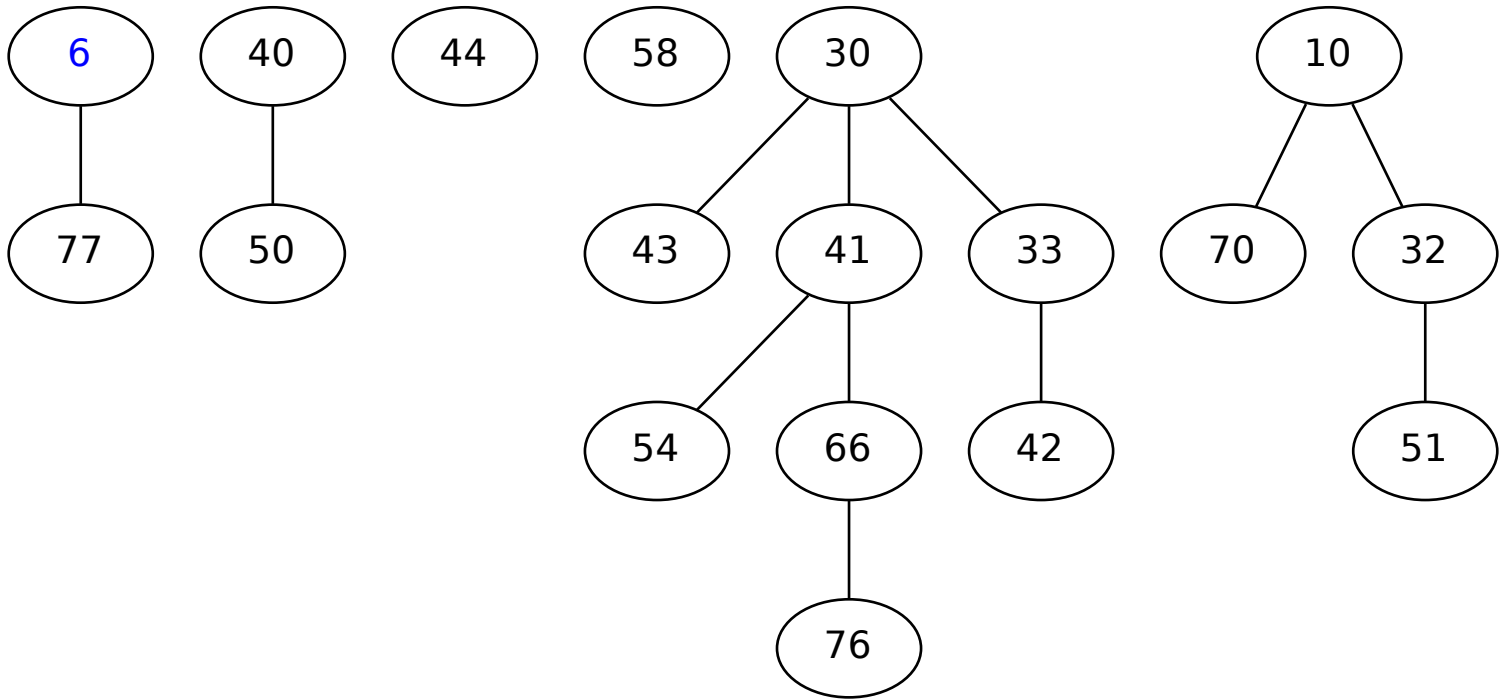




Within the invocation of  
`fh_0001.decreaseKey(66, 60)`  
Status: cascading cut: spliced out 44 and made it a root



Within the invocation of  
`fh_0001.decreaseKey(66, 60)`  
Status: cascading cut: spliced out 40 and made it a root



After executing  
fh\_0001.decreaseKey(66, 60)

Generated by \$Id: fibonacci.py 56 2010-11-04 09:40:16Z fms27 \$  
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