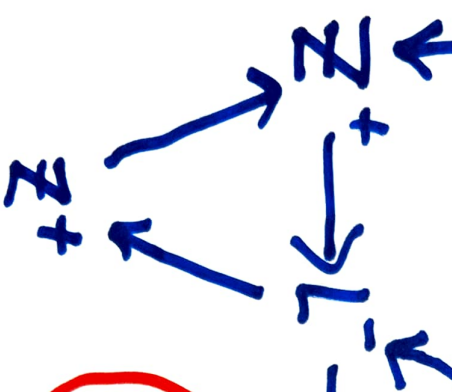


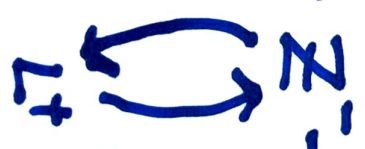
$L = L_0$
 $X = X_0 = x$

START



$L_1 = 0$
 $Z_1 = 2L_0 + 1$

$L_{i+1} = 0$
 $Z_{i+1} = 2L_i$



$L_1 = 2L_0 + 1$
 $Z_1 = 0$

$L_{i+1} = 2L_i$
 $Z_{i+1} = 0$

$X_{i+1} = X_i - 1$

$L = 2^{X_0} (2L_0 + 1)$
 $X = 0$

HALT

X⁻

~~Push~~

$$(L = L_0 = 2^x(2^{T_{x+1}})) \text{ or } L = \sqrt{L} = 0$$

START

$x \leftarrow x^{-1}$

$L \rightarrow \text{HALT}$

$L^+ \rightarrow L^-$
 $L^- \rightarrow L^+$

$x_{i+1} = x_i + 1$

$L_{i+1} = \frac{1}{2} Z_i$
 $Z_{i+1} = 0$

Z even

$L_{i+1} = \left(\frac{1}{2} Z_i\right) - 1$

Z odd

HALT

$L = \sqrt{x}$
 $x = x$

$L_1 = 0$
 $Z_1 = L_0$
 $Z_{i+1} = \frac{1}{2} L_{i+1}$

~~$L^+ \rightarrow L^-$~~
 ~~$L^- \rightarrow L^+$~~
~~POP~~