

linear_lookup

x, xspace, yspace

$x < \text{xspace}[0]$?

yes

$y = \text{yspace}[0]$

no

$x > \text{xspace}[n]$?

yes

$y = \text{yspace}[n]$

no

$i = 0$

$\text{NOT}(x \geq \text{xspace}[i] \text{ AND } x \leq \text{xspace}[i+1])$?

yes

$i = i + 1$

no

$\text{dydx} = (\text{yspace}[i+1] - \text{yspace}[i]) / (\text{xspace}[i+1] - \text{xspace}[i])$

$\text{deltax} = x - \text{xspace}[i]$

$y = \text{yspace}[i] + \text{deltax} * \text{dydx}$

return y

