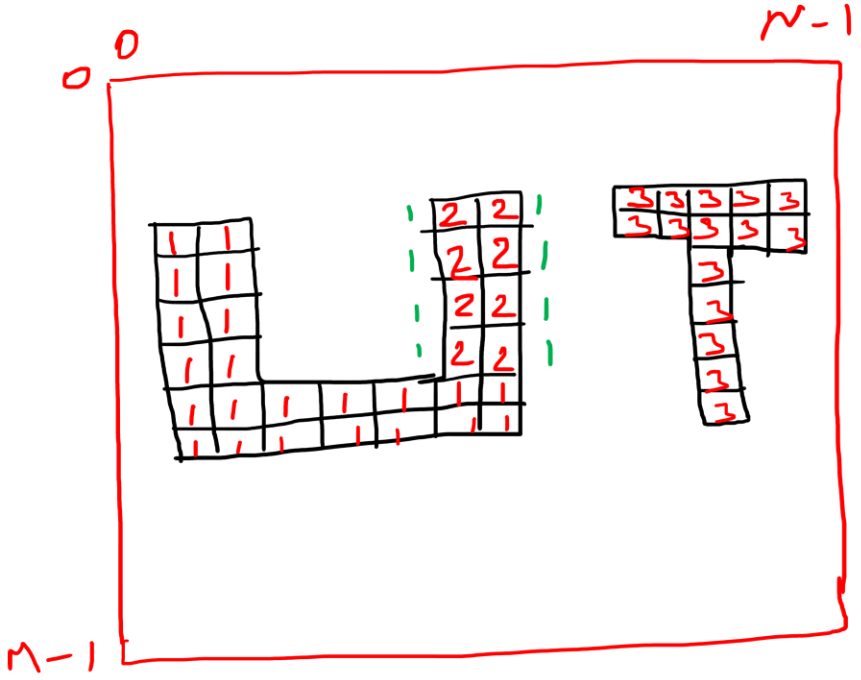
Component Labelling Algorithm

N_4

Foreground = '1'

Background = '0'



Pass # 1

Case (1)

$L(L) = \phi \;\&\; L(T) = \phi$

$L(P) = New$

Case (2)

2a) $L(L) \neq \phi \;\&\; L(T) = \phi$

$L(P) = L(L)$

2b) $L(L) = \phi \;\&\; L(T) \neq \phi$

$L(P) = L(T)$

Case (3) $L(L) \neq \phi \;\&\; L(T) \neq \phi$

3a) $L(L) = L(T)$

$\Rightarrow L(P) = L(L)$

3b) $L(L) \neq L(T)$

$L(P) = L(L)$

Pass # 2

$1 = 2$