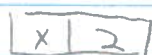


Q5

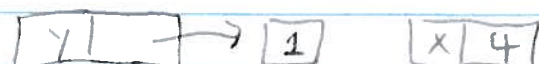
let  $y = \text{ref } 1$



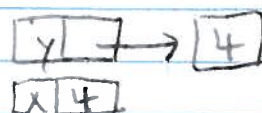
let  $x = 2$  in



let  $f = \text{let } x = !y + 3$



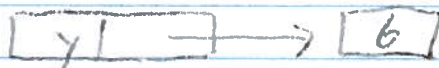
in  $(y := 4 ; \text{fun } u \rightarrow u + x + !y)$  in



let  $x = 3$  in



$y := !y + 2$



$f (!y + 3)$



So, the final int is 19 because  $f$  didn't use the overshadowed  $x$ .