



$f(!y+3)$

$f(9)=9+4+6$

$\therefore \text{int} = 19$

The last instruction to be executed was a call to  $f$  which is defined as  $(\text{fun } u \rightarrow u + x + !y)$  where the  $x$  is the sum of the value of ref  $y$  at that time (1) and 3.  $f$  was called with value of ref  $y$  plus 3 which was  $(6+3=9)$ . Finally, because function  $f$  uses the reference  $y$  and the contents of  $y$  has since changed to 6, the function  $f$  evaluates  $(9+4+6=19)$