

Q:6

Part(a)

Initial value $\Rightarrow i = 3, j = 5, K = 7$ execute $i < j \rightarrow \text{True}$ execute Instruction (2) = $j < K \rightarrow \text{True}$ execute (3) = $i = j;$ after execute $i = 5, j = 5, K = 7$ output ~~3 5 7~~ 5 5 7

Part (b)

Initial value $i = 3, j = 7, K = 5$ execute $i < j \rightarrow \text{True}$ execute Instruction (2) = $j < K \rightarrow \text{False}$ execute else instruction = $j = K;$ after execution $i = 3, j = 5, K = 5$ output ~~3 5 5~~ 3 5 5

Part (c)

Initial value $\Rightarrow i = 5, j = 3, K = 7$ execute $i < j \rightarrow \text{False}$ execute else instruction $j > K \rightarrow \text{False}$ execute else $i = K;$ after execution $i = 7, j = 3, K = 7$

Output 7 3 7

Part (d)

Initial value $i = 5$, $j = 7$, $k = 3$

execute $i < j \rightarrow \text{True}$

execute inner if $j < k \rightarrow \text{false}$

execute else $j = k$; a

~~Input~~ after ~~execute~~ $i = 5$, $j = 3$, $k = 3$

Output 5 3 3

Part (e)

Initial value $i = 7$, $j = 3$, $k = 5$

execute $i < j \rightarrow \text{false}$

execute outer else $j > k \rightarrow \text{false}$

execute inner else $i = k$;

after execute $i = 5$, $j = 3$, $k = 5$

Output 5 3 5

Part (f)

Initial value $i = 7$, $j = 5$, $k = 3$

execute $i < j \rightarrow \text{false}$

execute outer else $j > k \rightarrow \text{True}$

~~execute inner if~~ ~~after~~ execute $j = i$;

after execute $i = 7$, $j = 7$, $k = 3$

Output 7 7 3