

Q6,

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 execution: $i=5, j=5, k=7$

Output :- ~~5, 5, 7~~ 5 5 7

Part (B) :-

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

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

Part (C) :-

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

execute: $i < j \rightarrow \text{False}$

execute else $j > k \rightarrow \text{False}$

execute inner else $i = k;$

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

Output: 7 3 7

Part (d) :-

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

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

execute nested if : $j < k \rightarrow \text{False}$

execute else : $j = k;$

after execution : $i = 5, j = 3, k = 3$

Output :- 5 3 3

Part (e) :-

Initial Value $\Rightarrow i = 7, j = 3, k = 5$

execute : $i < j \rightarrow \text{False}$

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

execute inner else ; $i = k;$

after execution : $i = 5, j = 3, k = 5$

Output :- 5 3 5

Part (f) :-

Initial Value $\Rightarrow i = 7, j = 5, k = 3$

execute : $i < j \rightarrow \text{False}$

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

execute : $j = i$

after execution : $i = 7, j = 7, k = 3$

Output :- 7 7 3