

Question 1

Statement Coverage :

1. $A = [1,2,3,4]$, $v = [3]$,
2. $A = [1,2,3,4]$, $v = [5]$,

Condition Coverage:

1. $A = [1,2,3,4]$, $v = [4]$
2. $A = [1,2,3,4]$, $v = [5]$

Branch Coverage:

1. $A = []$, $v = \text{anything}$
2. $A = [1,2,3,4,5]$, $v = [5]$

Question 2

Statement Coverage :

1. $A = [1,2,3,3,4,5]$, $v = [3]$

Branch Coverage:

1. $A = [1,2,3,3,4,5]$, $v = [6]$
2. $A = []$, $v = \text{anything}$

Condition Coverage:

1. $A = [1,2,3,3,4,5]$, $v = [6]$

Question3

Statement Coverage :

1. $A = [1,2, 3 ,4,5,6,7,8,9,10,12,13,14,15,16]$, $v = 12$
2. $A = [1,2, 3 ,4,5,6,7,8,9,10]$, $v = 11$

Branch Coverage:

1. $A = []$, $v = \text{anything}$
2. $A = [1,2, 3 ,4,5,6,7,8,9,10,12,13,14,15,16]$, $v = 12$

Condition Coverage:

3. $A = [1,2, 3 ,4,5,6,7,8,9,10,12,13,14,15,16]$, $v = 8$
4. $A = [1,2, 3 ,4,5,6,7,8,9,10,12,13,14,15,16]$, $v = 1$
5. $A = [1,2, 3 ,4,5,6,7,8,9,10,12,13,14,15,16]$, $v = 16$

Question4

Statement Coverage :

1. $a = 3, b = 3, c = 3$
2. $a = 3, b = 3, c = 2$
3. $a = 5, b = 4, c = 3$
4. $a = 10, b = 2, c = 1$

Branch Coverage :

5. $a = 3, b = 3, c = 3$
6. $a = 3, b = 3, c = 2$
7. $a = 5, b = 4, c = 3$
8. $a = 10, b = 2, c = 1$

Condition Coverage :

9. $a = 3, b = 3, c = 3$
10. $a = 3, b = 3, c = 2$
11. $a = 5, b = 4, c = 3$
12. $a = 10, b = 2, c = 1$

Question5

Statement Coverage :

1. $S1 = \text{"abcd"}, s2 = \text{"abc"}$
2. $S1 = \text{"abcd"}, s2 = \text{"efgh"}$
3. $S1 = \text{"abcd"}, S2 = \text{"abcde"}$

Branch Coverage:

4. $S1 = \text{"abcd"}, s2 = \text{"abc"}$
5. $S1 = \text{"abcd"}, s2 = \text{"efgh"}$
6. $S1 = \text{"abcd"}, S2 = \text{"abcde"}$

Statement Coverage:

7. $S1 = \text{"abcd"}, s2 = \text{"abc"}$
8. $S1 = \text{"abcd"}, s2 = \text{"efgh"}$
9. $S1 = \text{"abcd"}, S2 = \text{"abcde"}$