

## EXPERIMENT 3

I. Write a program to generate test cases using Worst Case approach.

### SOURCE CODE

```
#include <stdio.h>
#include <conio.h>
int main() {
    int n, a, b, c, k, id, i=0, j=0;
    printf("Number of variables: ");
    scanf("%d",&n);
    int arr[20][5];
    for (a=0;a<n;a++) {
        printf("Var%d",a+1);
        for (b=0;b<2;b++) {
            if(b==0) {
                printf("\tMinimum Value: ");
                scanf("%d",&arr[a][0]);
            }
            else {
                printf("\tMaximum Value: ");
                scanf("%d",&arr[a][4]);
            }
        }
        arr[a][1] = arr[a][0]+1;
        arr[a][2] = (arr[a][0]+arr[a][4])/2;
        arr[a][3] = arr[a][4]-1;
    }

    id = 1;
    printf("T_id\t");
    for (a=0;a<3;a++) {
        printf("Var%d\t",a+1);
    }
    printf("\n");
    for (a=0;a<5;a++) {
        for (b=0;b<5;b++) {
            for (k=0;k<5;k++) {
                printf("%d.\t%d\t%d\t%d\t%d\n",id++,arr[0][a],arr[1][b],arr[2][k]);
            }
        }
    }

    getch();
    return 0;
}
```

### OUTPUT:

C:\Users\hp\Desktop\st1\bin\Debug\st1.exe				C:\Users\hp\Desktop\st1\bin\Debug\st1.exe			
Number of variables: 5				Number of variables: 5			
Var1	Minimum Value: 1			Var1	Minimum Value: 1		
	Maximum Value: 100				Maximum Value: 100		
Var2	Minimum Value: 1			Var2	Minimum Value: 1		
	Maximum Value: 100				Maximum Value: 100		
Var3	Minimum Value: 1			Var3	Minimum Value: 1		
	Maximum Value: 100				Maximum Value: 100		
Var4	Minimum Value: 1			Var4	Minimum Value: 1		
	Maximum Value: 100				Maximum Value: 100		
Var5	Minimum Value: 1			Var5	Minimum Value: 1		
	Maximum Value: 100				Maximum Value: 100		
T_id	Var1	Var2	Var3	T_id	Var1	Var2	Var3
1.	1	1	1	1.	1	1	1
2.	1	1	2	2.	1	1	2
3.	1	1	50	3.	1	1	50
4.	1	1	99	4.	1	1	99
5.	1	1	100	5.	1	1	100
6.	1	2	1	6.	1	2	1
7.	1	2	2	7.	1	2	2
8.	1	2	50	8.	1	2	50
9.	1	2	99	9.	1	2	99
10.	1	2	100	10.	1	2	100
11.	1	50	1	11.	1	50	1
12.	1	50	2	12.	1	50	2
13.	1	50	50	13.	1	50	50
14.	1	50	99	14.	1	50	99
15.	1	50	100	15.	1	50	100
16.	1	99	1	16.	1	99	1
17.	1	99	2	17.	1	99	2
18.	1	99	50	18.	1	99	50
19.	1	99	99	19.	1	99	99
20.	1	99	100	20.	1	99	100
21.	1	100	1	21.	1	100	1
22.	1	100	2	22.	1	100	2
23.	1	100	50	23.	1	100	50
24.	1	100	99	24.	1	100	99
25.	1	100	100	25.	1	100	100
26.	2	1	1	26.	2	1	1
27.	2	1	2	27.	2	1	2
28.	2	1	50	28.	2	1	50
29.	2	1	99	29.	2	1	99
30.	2	1	100	30.	2	1	100
31.	2	2	1	31.	2	2	1
32.	2	2	2	32.	2	2	2
33.	2	2	50	33.	2	2	50
34.	2	2	99	34.	2	2	99
35.	2	2	100	35.	2	2	100
36.	2	50	1	36.	2	50	1
37.	2	50	2	37.	2	50	2
38.	2	50	50	38.	2	50	50
39.	2	50	99	39.	2	50	99
40.	2	50	100	40.	2	50	100
41.	2	99	1	41.	2	99	1
42.	2	99	2	42.	2	99	2
43.	2	99	50	43.	2	99	50
44.	2	99	99	44.	2	99	99
45.	2	99	100	45.	2	99	100

```
C:\Users\hp\Desktop\st1\bin\Debug\st1.exe
103. 100 1 50
104. 100 1 99
105. 100 1 100
106. 100 2 1
107. 100 2 2
108. 100 2 50
109. 100 2 99
110. 100 2 100
111. 100 50 1
112. 100 50 2
113. 100 50 50
114. 100 50 99
115. 100 50 100
116. 100 99 1
117. 100 99 2
118. 100 99 50
119. 100 99 99
120. 100 99 100
121. 100 100 1
122. 100 100 2
123. 100 100 50
124. 100 100 99
125. 100 100 100

Process returned 0 (0x0) execution time : 12.199 s
Press any key to continue.
```