DAA PRACTICAL EXAM

NAME: PARV GUPTA

ROLL NO: 1427

EXAM ROLL NO: 19020570025

COURSE:BSc(H) computer science

Q1


```
C:\Users\Charu Gupta\Desktop\Red&Black-tree(q1).exe
Enter your choice.
1.Insertion.
2.Deletion.
3.Search a number.
4.Display its preorder and inorder transversals.
5.Exit.
1
```



```
C:\Users\Charu Gupta\Desktop\Red&Black-tree(q1).exe

Enter the number to be inserted in tree.
5
```



```
C:\Users\Charu Gupta\Desktop\Red&Black-tree(q1).exe

Enter the number to be inserted in tree.
6
```



```
C:\Users\Charu Gupta\Desktop\Red&Black-tree(q1).exe

Enter the number to be inserted in tree.
7
```

Enter the number to be inserted in tree.
8

Preorder:

Element: 6   Color: Black
Element: 5   Color: Black
Element: 7   Color: Black
Element: 8   Color: Red
Inorder:

Element: 5   Color: Black
Element: 6   Color: Black
Element: 7   Color: Black
Element: 8   Color: RedPress any key to continue . . .

Enter number to be deleted.
5

Preorder:

Element: 7   Color: Black
Element: 6   Color: Black
Element: 8   Color: Black
Inorder:

Element: 6   Color: Black
Element: 7   Color: Black
Element: 8   Color: BlackPress any key to continue . . .

```
C:\Users\Charu Gupta\Desktop\Red&Black-tree(q1).exe
Enter your choice.
1.Insertion.
2.Deletion.
3.Search a number.
4.Display its preorder and inorder transversals.
5.Exit.
3
```



```
C:\Users\Charu Gupta\Desktop\Red&Black-tree(q1).exe

Enter number to be searched.
6

6color :blackPress any key to continue . . .
```

Q2


```
C:\Users\Charu Gupta\Desktop\Untitled1.exe
the edges in the constructed MST are
2 -- 3 == 4
0 -- 3 == 6
0 -- 1 == 15
Minimum Cost Spanning Tree: 25

--------------------------------
Process exited after 0.2031 seconds with return value 0
Press any key to continue . . .
```

Q3

```
C:\Users\Charu Gupta\Desktop\q3 sort.exe                    —

Enter the size: 6
Enter element number 1: 5
Enter element number 2: 4
Enter element number 3: 1
Enter element number 4: 2
Enter element number 5: 3
Enter element number 6: 9

OPTIONS

1.Bubble Sort
2.Selection Sort
3.Insertion Sort
4.Merge Sort
5.Quick Sort
Press 6 to exit
Enter your choice: 1

Initial array: 5 4 1 2 3 9
Bubble Sort
Sorted array: 1 2 3 4 5 9
Number of Comparisons: 12
--------------------------------
Process exited after 12 seconds with return value 0
Press any key to continue . . .
```