

OUTPUTS SCREENSHOT OF PROGRAMS:-

QUESTION -1 :-

ENTERED ELEMENT IS – “1234”

CHOICES-

```
Enter your choice.  
1.Insertion.  
2.Deletion.  
3.Search a number.  
4.Display its preorder and inorder transversals.  
5.Exit.
```

SEARCH:-

```
Enter number to be searched.  
1234  
1234color :blackPress any key to continue . . .
```

PRODER AND INORDER :-

```
Preorder:  
Element: 1234    Color: Black  
Inorder:  
Element: 1234    Color: BlackPress any key to continue . . .
```

DELETION:-

```
Enter number to be deleted.  
3  
Element is not in the tree  
Press any key to continue . . .
```

QUESTION 2:-

```
Enter the no. of vertices in the graph:3

Enter the weights of the following:
edge 1 , 2 :3
edge 1 , 3 :
4
edge 2 , 3 :6

The edges in the given graph are::
< 1 , 2 > 3
< 1 , 3 > 4
< 2 , 3 > 6

After sorting the edges in the given graph are::
1 , 2 > ::3
1 , 3 > ::4
2 , 3 > ::6

***** THE MINIMUM SPANNING TREE IS*****The edge included in MST is :: < 1 , 2 >
The edge included in MST is :: < 1 , 3 >
Edge < 2 , 3 > is not included as it forms a cycle

...Program finished with exit code 0
Press ENTER to exit console.
```

QUESTION 3:-

```
Enter the size of the list: 3
Enter element 1: 2
Enter element 2: 3
Enter element 3: 4

Numbers entered: 2,3,4,
Menu:

1.Bubble sort
2.Selection Sort
3.Inserton sort
4.Exit
Your choice: 1

Sorted list in ascending order:
2,3,4,
Do you want to continue<press 1 to continue any other number to exit>: 1
Menu:

1.Bubble sort
2.Selection Sort
3.Inserton sort
4.Exit
Your choice: 3
Sorted list is: 2,3,4,
```

```
Sorted list is: 2,3,4,  
Do you want to continue<press 1 to continue any other number to exit>: 1  
Menu:  
1.Bubble sort  
2.Selection Sort  
3.Inserton sort  
4.Exit  
Your choice: 3  
Sorted list is: 2,3,4,  
Do you want to continue<press 1 to continue any other number to exit>:
```