KA SHANKAR NARAYAN

DAA PRACTICAL
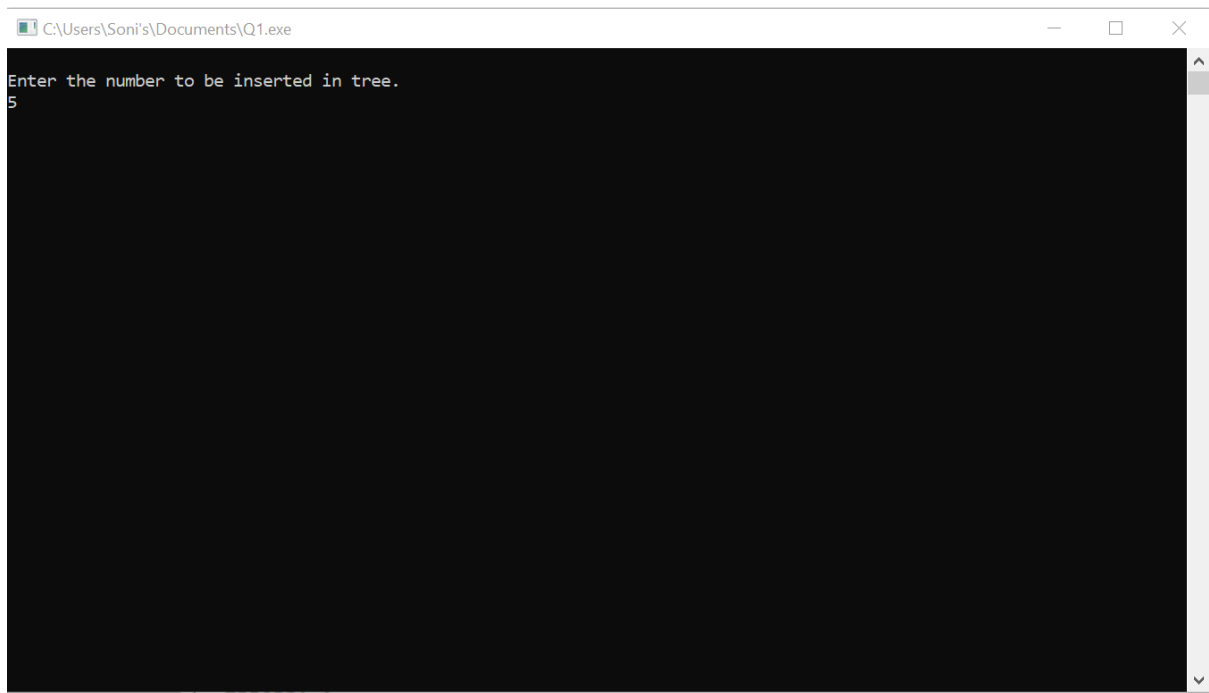
20191417

19020570018

Q1


```
C:\Users\Soni's\Documents\Q1.exe
Enter your choice.
1.Insertion.
2.Deletion.
3.Search a number.
4.Display its preorder and inorder transversals.
5.Exit.
```

Insertion

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

Deletion

```
Enter number to be deleted.
5
Press any key to continue . . .
```
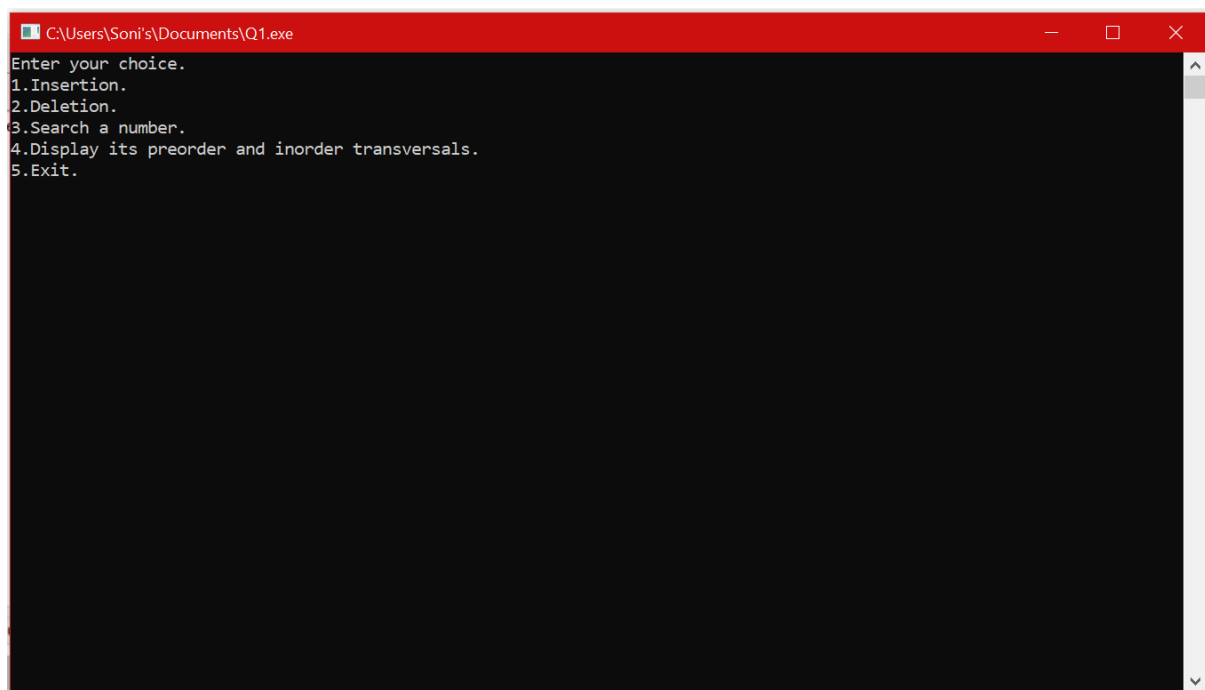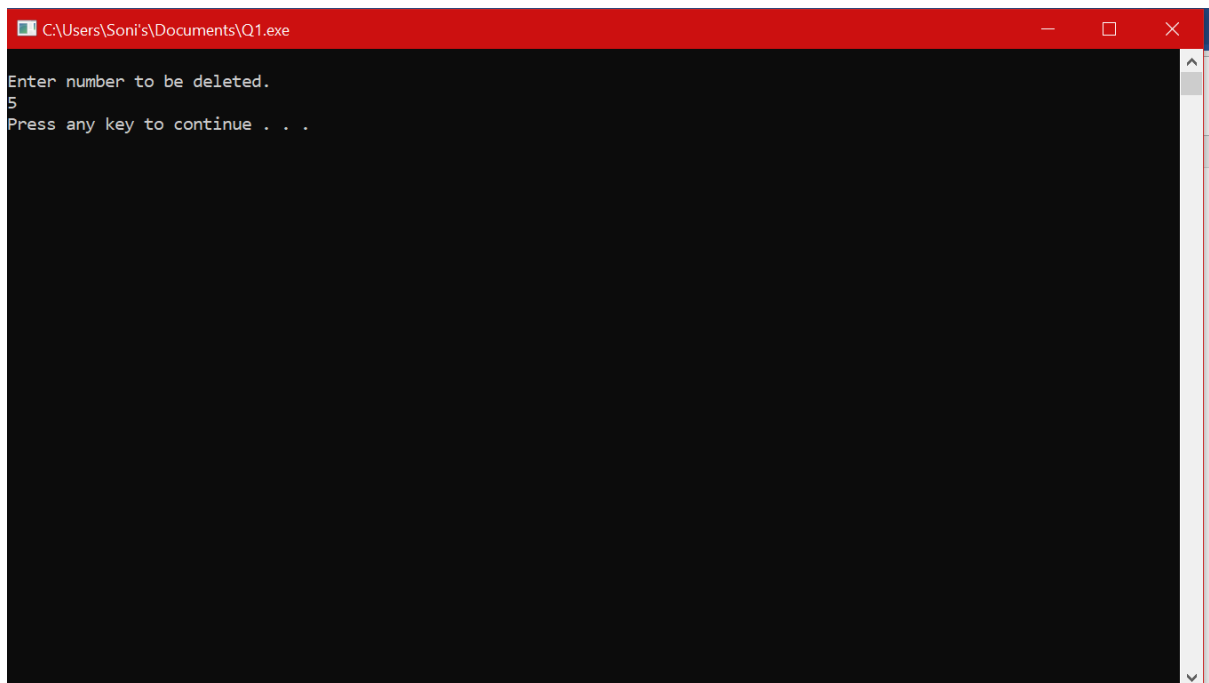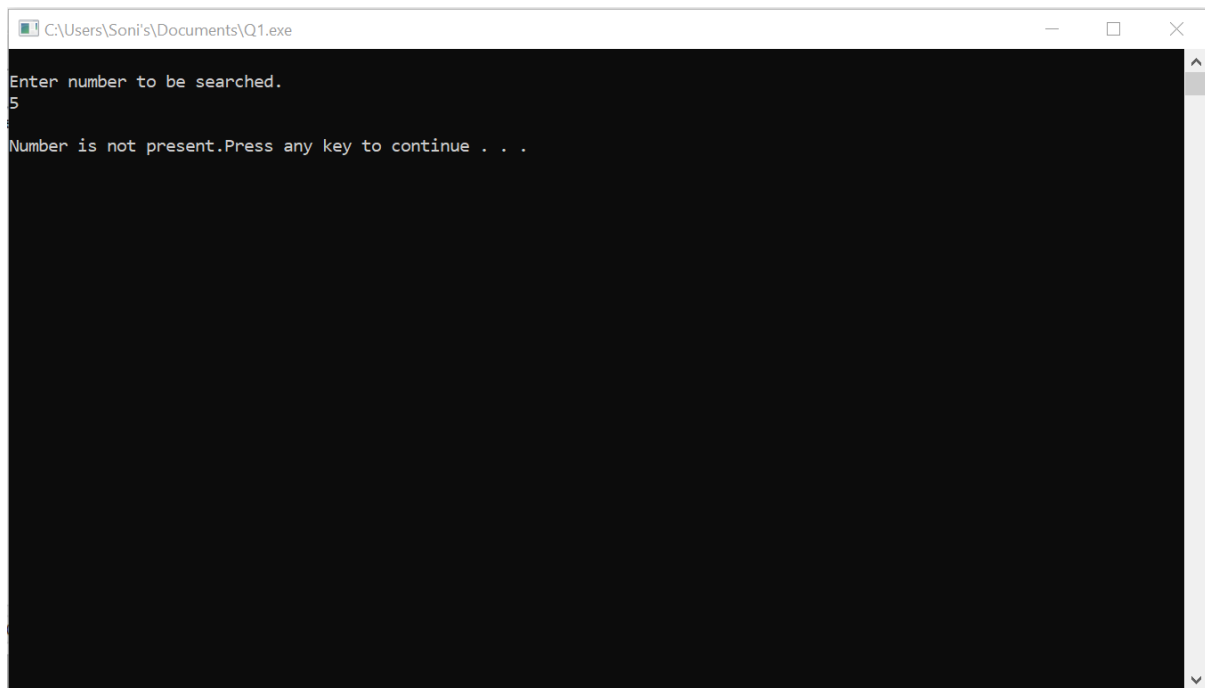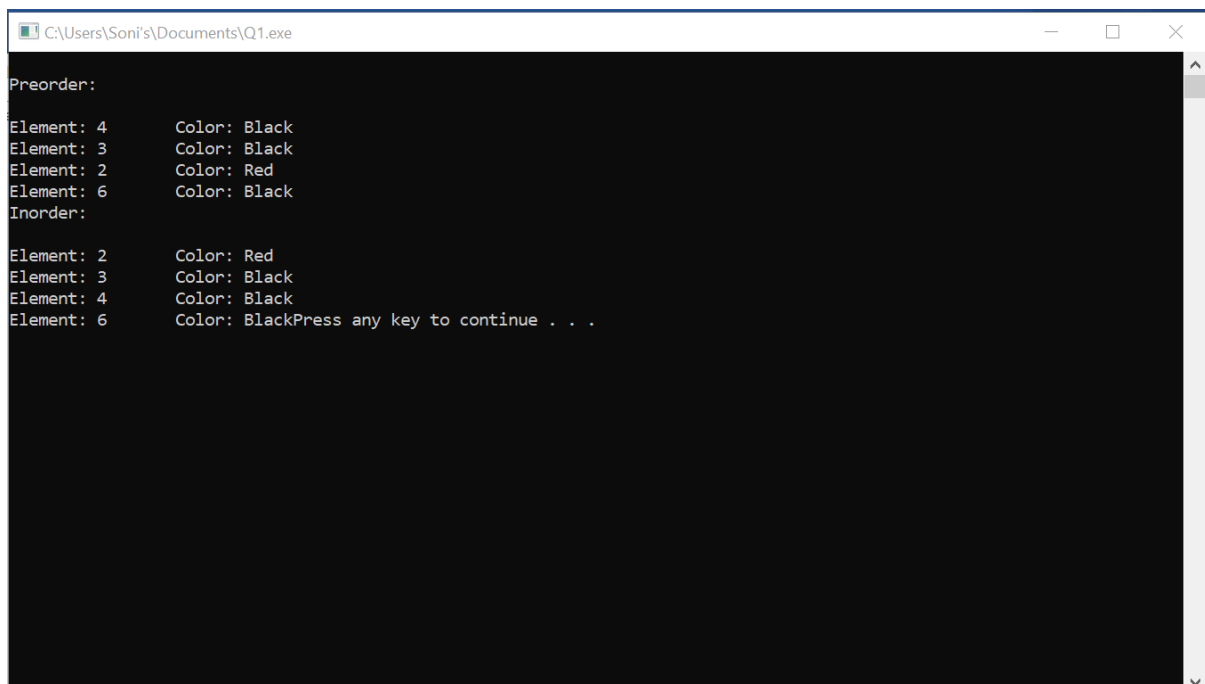
Search a number

```
C:\Users\Soni's\Documents\Q1.exe                                    —    □    ×

Enter number to be searched.
5

Number is not present.Press any key to continue . . .
```

Display its preorder and inorder transversals

```
C:\Users\Soni's\Documents\Q1.exe                                    —    □    ×

Preorder:

Element: 4        Color: Black
Element: 3        Color: Black
Element: 2        Color: Red
Element: 6        Color: Black
Inorder:

Element: 2        Color: Red
Element: 3        Color: Black
Element: 4        Color: Black
Element: 6        Color: BlackPress any key to continue . . .
```

Q2

```
vertices:5

 weights of the following:
edge 1 , 2 :2
edge 1 , 3 :4
edge 1 , 4 :4
edge 1 , 5 :4
edge 2 , 3 :5
edge 2 , 4 :6
edge 2 , 5 :7
edge 3 , 4 :8
edge 3 , 5 :9
edge 4 , 5 :3


 Edges:
 < 1 , 2 > 2
 < 1 , 3 > 4
 < 1 , 4 > 4
 < 1 , 5 > 4
 < 2 , 3 > 5
 < 2 , 4 > 6
 < 2 , 5 > 7
 < 3 , 4 > 8
 < 3 , 5 > 9
 < 4 , 5 > 3


Edges:
1 , 2 > ::2
4 , 5 > ::3
1 , 3 > ::4
1 , 4 > ::4
1 , 5 > ::4
2 , 3 > ::5
2 , 4 > ::6
2 , 5 > ::7
3 , 4 > ::8
3 , 5 > ::9
```

```
Edges:
1 , 2 > ::2
4 , 5 > ::3
1 , 3 > ::4
1 , 4 > ::4
1 , 5 > ::4
2 , 3 > ::5
2 , 4 > ::6
2 , 5 > ::7
3 , 4 > ::8
3 , 5 > ::9

********* THE MINIMUM SPANNING TREE IS**************The edge included in MST is :: < 1 , 2 >
The edge included in MST is :: < 4 , 5 >
The edge included in MST is :: < 1 , 3 >
The edge included in MST is :: < 1 , 4 >
Edge  < 1 , 5 > is not included as it forms a cycle

Edge  < 2 , 3 > is not included as it forms a cycle

Edge  < 2 , 4 > is not included as it forms a cycle

Edge  < 2 , 5 > is not included as it forms a cycle

Edge  < 3 , 4 > is not included as it forms a cycle

Edge  < 3 , 5 > is not included as it forms a cycle


--------------------------------
Process exited after 16.44 seconds with return value 0
Press any key to continue . . .
```