



# **RAMANUJAN COLLEGE**

## **(University of Delhi)**

# **DAA PRACTICAL**

### **Submitted By:-**

**Name:** Reet Chauhan

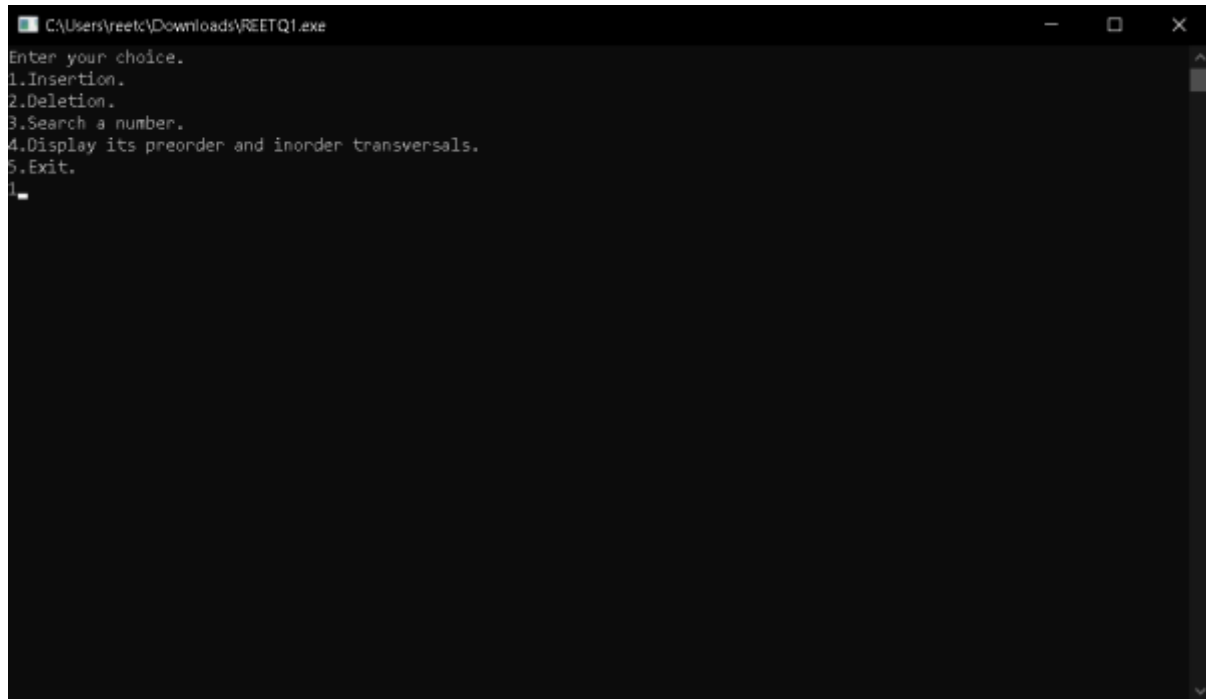
**University Roll No.:** 19020570029

**College Roll No.:** 20191432

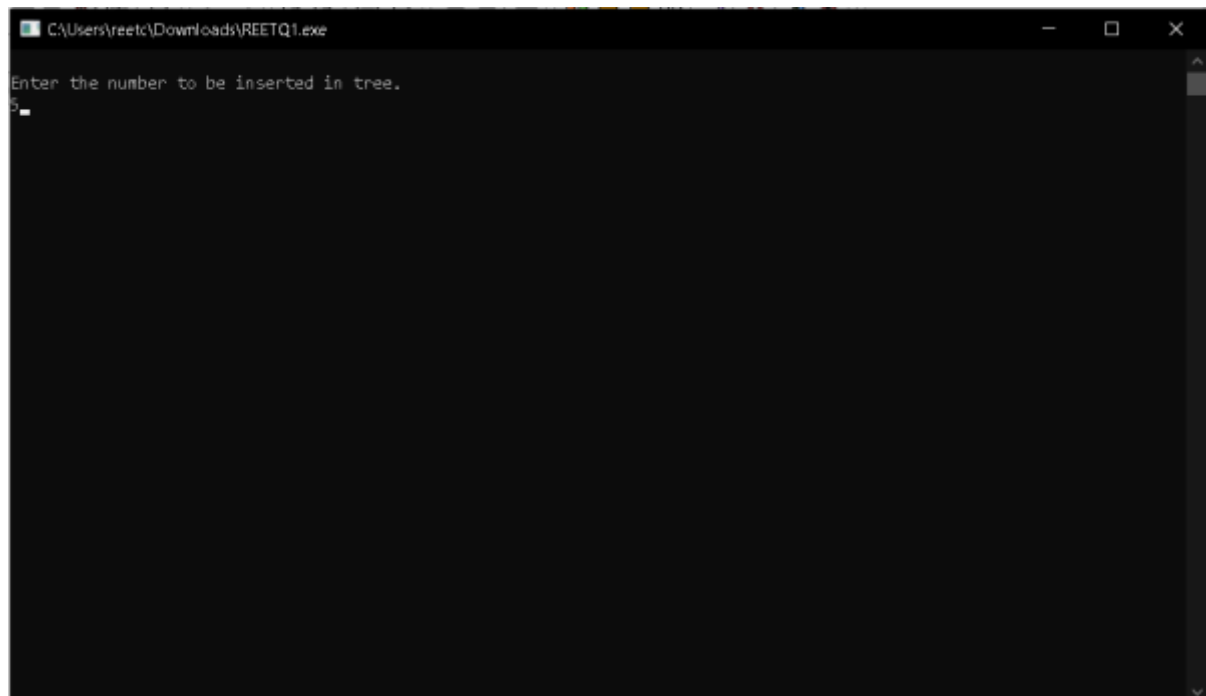
### **Submitted To:-**

**Name:** Mr. Vipin Rathi

## QUES 1: OUTPUTS



```
C:\Users\reetc\Downloads\REETQ1.exe
Enter your choice.
1.Insertion.
2.Deletion.
3.Search a number.
4.Display its preorder and inorder transversals.
5.Exit.
1_
```



```
C:\Users\reetc\Downloads\REETQ1.exe
Enter the number to be inserted in tree.
5_
```

```
C:\Users\reetc\Downloads\REETQ1.exe
Enter number to be deleted.
3
Press any key to continue . . .
```

```
C:\Users\reetc\Downloads\REETQ1.exe
Enter number to be searched.
5
5color:redPress any key to continue . . .
```

```
C:\Users\yeetc\Downloads\REETQ1.exe

Preorder:
Element: 2      Color: Black
Element: 1      Color: Black
Element: 5      Color: Red
Element: 4      Color: Black
Element: 6      Color: Black
Inorder:

Element: 1      Color: Black
Element: 2      Color: Black
Element: 4      Color: Black
Element: 5      Color: Red
Element: 6      Color: BlackPress any key to continue . . .
```

## QUES 2: OUTPUTS

```
C:\Users\reetc\Downloads\REETQ2.exe

*****KRUSKAL'S ALGORITHM*****
Enter the no. of vertices in the graph:3

Enter the weights of the following:
edge 1 , 2 :3 , 5
edge 1 , 3 :edge 2 , 3 :

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

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

***** THE MINIMUM SPANNING TREE IS*****The edge included in MST is :: < 1 , 2 >

-----
Process exited after 15.97 seconds with return value 0
Press any key to continue . . .
```

## QUES 3: OUTPUTS

```
C:\Users\reetc\Downloads\REETQ3.exe
Enter number of elements to be sorted:
6
Enter 6 elements to be sorted:
5 8 7 3 9 1
Enter the sorting technique to be used
1. Bubble Sort
2. Selection Sort
3. Insertion Sort
4. Merge Sort
5. Quick Sort
1
Sorted array is:1 3 5 7 8 9
No of Comparisions : 6
-----
Process exited after 20.17 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\reetc\Downloads\REETQ3.exe
Enter number of elements to be sorted:
6
Enter 6 elements to be sorted:
5 8 7 3 9 1
Enter the sorting technique to be used
1. Bubble Sort
2. Selection Sort
3. Insertion Sort
4. Merge Sort
5. Quick Sort
2
Sorted array is:1 3 5 7 8 9
No of Comparisions : 6
-----
Process exited after 70.13 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\reetc\Downloads\REETQ3.exe

Enter number of elements to be sorted:
6

Enter 6 elements to be sorted:
5 8 7 3 9 1

Enter the sorting technique to be used
1. Bubble Sort
2. Selection Sort
3. Insertion Sort
4. Merge Sort
5. Quick Sort
3

Sorted array is: 1 3 5 7 8 9
No of Comparisions : 9
-----
Process exited after 6.464 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\reetc\Downloads\REETQ3.exe

Enter number of elements to be sorted:
6

Enter 6 elements to be sorted:
5 8 7 3 9 1

Enter the sorting technique to be used
1. Bubble Sort
2. Selection Sort
3. Insertion Sort
4. Merge Sort
5. Quick Sort
4

sorted array is:
1 3 5 7 8 9
Total number of comparisons are: 10
-----
Process exited after 15.37 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\reetc\Downloads\REETQ3.exe

Enter number of elements to be sorted:
6

Enter 6 elements to be sorted:
5 8 7 3 9 1

Enter the sorting technique to be used
1. Bubble Sort
2. Selection Sort
3. Insertion Sort
4. Merge Sort
5. Quick Sort
5

sorted array is:
1 3 5 7 8 9
Total number of comparisons are: 6
.....
Process exited after 6.709 seconds with return value 0
Press any key to continue . . .
```