DAA

Practical Exam 2021

BSc. Computer Science

Semester – 4

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Roll no   -   2019/1405

Exam Roll No. -   19020570005

QUESTION -01

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

Enter the number to be inserted in tree.
25

Preorder:

Element: 25   Color: Black
Inorder:

Element: 25   Color: BlackPress any key to continue . . .

After inserting several elements:

Preorder:

Element: 25	Color: Black
Element: 5	Color: Black
Element: 26	Color: Black
Element: 56	Color: Red

Inorder:

Element: 5	Color: Black
Element: 25	Color: Black
Element: 26	Color: Black
Element: 56	Color: RedPress any key to continue . . .

Enter number to be deleted.
5

Preorder:

Element: 26	Color: Black
Element: 25	Color: Black
Element: 56	Color: Black

Inorder:

Element: 25	Color: Black
Element: 26	Color: Black
Element: 56	Color: BlackPress any key to continue . . . .

```
Enter number tou want to serach.
56

56color :    black
Press any key to continue . . .
```

QUESTION -02

```
***************KRUSKAL'S ALGORITHM****************
Enter the no. of vertices in the graph:6

Enter the weights of the following:
edge 1 , 2 :
```

```
C:\Users\Anjali Yadav\OneDrive\Desktop\Practical\Question-2.exe

********* THE MINIMUM SPANNING TREE IS**************The edge included in MST is :: < 1 , 4 >
The edge included in MST is :: < 2 , 3 >
The edge included in MST is :: < 1 , 2 >
The edge included in MST is :: < 2 , 5 >
The edge included in MST is :: < 4 , 6 >
Edge  < 1 , 3 > is not included as it forms a cycle

Edge  < 2 , 6 > is not included as it forms a cycle

Edge  < 5 , 6 > is not included as it forms a cycle

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

Edge  < 3 , 6 > is not included as it forms a cycle

Edge  < 1 , 5 > is not included as it forms a cycle

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

Edge  < 4 , 5 > is not included as it forms a cycle

Edge  < 1 , 6 > is not included as it forms a cycle

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


-------------------------------
Process exited after 20.69 seconds with return value 0
Press any key to continue . . .
```

QUESTION -03

```
C:\Users\Anjali Yadav\OneDrive\Desktop\Practical\Q3.exe

Enter the size of array:
5
```

```
Enter the size of array:
5

Enter elements in an array:
5
6
25
3
4
```

```
Enter the size of array:
5

Enter elements in an array:
5
6
25
3
4

Elements are:
5 6 25 3 4
------Enter choice--------


1. Bubble Sort
2. Selection Sort
3. Insertion sort
 4. Merge Sort
 5. Quick sort
6. Exit
```

```
Enter elements in an array:
5
6
25
3
4

Elements are:
5 6 25 3 4
------Enter choice--------


1. Bubble Sort
2. Selection Sort
3. Insertion sort
 4. Merge Sort
 5. Quick sort
6. Exit
5

sorted array is:
 3 4 5 6 25
Total number of comparisons are: 5
--------------------------------
Process exited after 90.11 seconds with return value 0
Press any key to continue . . .
```