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BSc Hons Computer Science

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QUESTION 1

Output

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

```
Enter the number to be inserted in tree.
2
```

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

```
Enter the number to be inserted in tree.
25
```

```
Enter the number to be inserted in tree.
14_
```

Search

```
Enter number to be searched.
14

14color : redPress any key to continue . . .
```

Deletion

```
Enter number to be deleted.
14
Press any key to continue . . .
```

```
Enter number to be searched.
14

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

Exit

```
--------------------------------
Process exited after 900.1 seconds with return value 0
Press any key to continue . . .
```

Question 2

Output

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

Enter the weights of the following:
edge 1 , 2 :10
edge 1 , 3 :20
edge 2 , 3 :60


The edges in the given graph are::
 < 1 , 2 > 10
 < 1 , 3 > 20
 < 2 , 3 > 60


After sorting the edges in the given graph are::
1 , 2 > ::10
1 , 3 > ::20
2 , 3 > ::60

********* 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



--------------------------------
Process exited after 42.77 seconds with return value 0
Press any key to continue . . .
```

Question 3

Output

```
C:\Users\91931\Desktop\Question 3_DAA_PRACTICAL.exe
Enter your choice.
1.Bubble Sort.
2.Insertion Sort.
3.Selection Sort.
4.Quick Sort.
5.Merge Sort
6.Exit.
1
              A: [9, 4, 7, 11, 15, 8, 3, 5, 12, 1]
After Bubble Sort
 Sorted A: [1, 3, 4, 5, 7, 8, 9, 11, 12, 15]
Enter your choice.
1.Bubble Sort.
2.Insertion Sort.
3.Selection Sort.
4.Quick Sort.
5.Merge Sort
6.Exit.
2
              A: [4, 2, 45, 9, 6, 7, 12, 3, 11, 25]
After insertion Sort
Sorted B: [2, 3, 4, 6, 7, 9, 11, 12, 25, 45]
Enter your choice.
1.Bubble Sort.
2.Insertion Sort.
3.Selection Sort.
4.Quick Sort.
5.Merge Sort
6.Exit.
3
              A: [9, 7, 31, 10, 18, 12, 6, 5, 13, 4]
After Selection Sort
 Sorted C: [4, 5, 6, 7, 9, 10, 12, 13, 18, 31]
Enter your choice.
1.Bubble Sort.
2.Insertion Sort.
3.Selection Sort.
4.Quick Sort.
5.Merge Sort
6.Exit.
```

```
4
                A: [5, 4, 6, 7, 9, 8, 17, 14, 1, 2]
After Quick Sort
 Sorted D: [1, 4, 5, 6, 7, 8, 9, 14, 17]

Enter your choice.
1.Bubble Sort.
2.Insertion Sort.
3.Selection Sort.
4.Quick Sort.
5.Merge Sort
6.Exit.
5
                A: [7, 2, 8, 1, 4, 5, 3, 4, 15, 11]
After Merge Sort
 Sorted E: [1, 2, 3, 4, 4, 5, 7, 8, 11, 15]
Enter your choice.
1.Bubble Sort.
2.Insertion Sort.
3.Selection Sort.
4.Quick Sort.
5.Merge Sort
6.Exit.
6


--------------------------------
Process exited after 11.22 seconds with return value 0
Press any key to continue . . . _
```