DAA practical exam

Himanshu chadha 19020570016

Outputs:-

Q1:-

```
Red Black Tree created successfully.
Please Enter your choice :-
1. Insert data in tree.
2. Delete data from the tree.
3. Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter the number to be inserted in tree : 2
Data inserted in tree successsfully.
Please Enter your choice :-
1. Insert data in tree.
Delete data from the tree.

    Search for data in the tree.
    Create new tree.

Press any other button to exit.
Enter the number to be inserted in tree : 4
Data inserted in tree successsfully.
Please Enter your choice :-
1. Insert data in tree.
2. Delete data from the tree.
3. Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter the number to be inserted in tree : 6
Data inserted in tree successsfully.
```

```
Please Enter your choice :-

    Insert data in tree.

2. Delete data from the tree.
Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter number to be deleted : 4
Data deleted from tree successsfully.
Please Enter your choice :-

    Insert data in tree.

Delete data from the tree.
Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter number to be searched : 6
DATA FOUND. COLOR OF THE NODE IS : BLACK
Please Enter your choice :-

    Insert data in tree.

Delete data from the tree.
Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter number to be searched : 4
ERROR : DATA NOT FOUND.
```

```
Please Enter your choice :-

    Insert data in tree.

Delete data from the tree.
Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter the number to be inserted in tree : 4
Data inserted in tree successsfully.
Please Enter your choice :-

    Insert data in tree.

Delete data from the tree.
Search for data in the tree.
4. Create new tree.
Press any other button to exit.
Enter number to be searched : 4
DATA FOUND. COLOR OF THE NODE IS : BLACK
Please Enter your choice :-

    Insert data in tree.

Delete data from the tree.
Search for data in the tree.
4. Create new tree.
Press any other button to exit.
```

Q2:-

```
Enter the no. of vertices : 4
Enter the no. of edges : 5
Enter the no. from which graph starts : 1
Press 0 to enter edges manually or Press 1 to enter edges with help : 1
Enter weight of the edge between 1 and 1 vertices :(0 if no edge present) : 2
Enter weight of the edge between 1 and 2 vertices :(0 if no edge present) : 3
Enter weight of the edge between 1 and 3 vertices :(0 if no edge present) : 4
Enter weight of the edge between 1 and 4 vertices :(0 if no edge present) : 3
Enter weight of the edge between 2 and 2 vertices :(0 if no edge present) : 5
Enter weight of the edge between 2 and 3 vertices :(0 if no edge present) : 6
Enter weight of the edge between 2 and 4 vertices :(0 if no edge present) : 2
Enter weight of the edge between 3 and 3 vertices :(0 if no edge present) : 4
Enter weight of the edge between 3 and 4 vertices :(0 if no edge present) : 6
Enter weight of the edge between 4 and 4 vertices :(0 if no edge present) : 2
Edge
       Weight
1 - 2
1 - 3 4
2 - 4
       2
Press 1 to search again / any other key to exit :
```

Q3:-