Code:

```cpp
#include <bits/stdc++.h>
using namespace std;

int main() {

    int front =-1;
    int rear = -1;
    int cap=0;
    cout << "Enter capacity of queue\n";
    cin >> cap;
    int q[cap];

    cout << "Options:\n1. Insert Element\n2. Delete Element\n3.Traverse through
the queue\n4. Destroy queue\n5. Exit\n";
    while(true)
    {
        cout << "Enter choice\n";
        int choice;
        cin >> choice;
        switch(choice)
        {
            case 1:
            if(rear<cap-1) //queue is not full
            {
                int el;
                cout << "Enter element\n";
                cin >> el;
                q[++rear] = el;
                if(front==-1) front=0;
            }
            else{
                cout << "Queue is full" << endl;
            }
            break;
            case 2:
            if(front<=rear)
            {
                int temp = q[front];
```

```cpp
            if(front==rear) {front = -1; rear=-1;}
            else front++;
            cout << temp << endl;
        }
        else
        cout << "Queue is empty\n";
        break;
        case 3:
        for(int i=front;i<=rear;i++)
        {
            cout << q[i] << " ";
        }cout << endl;
        break;
        case 4:
        if(front<=rear) //not empty
        {
            while(front<=rear)
            {
                cout << q[front++] << " ";
            } cout << endl;
            front = rear = -1;
        }
        else
        {
            cout << "Queue is empty\n";
        }
        break;
        default:
        return 0;
    }
}
}
```

Output:

```
Enter capacity of queue
5
Options:
1. Insert Element
2. Delete Element
3.Traverse through the queue
4. Destroy queue
5. Exit
Enter choice
1
Enter element
10
Enter choice
1
Enter element
30
Enter choice
1
Enter element
23
Enter choice
1
Enter element
23
Enter choice
1
Enter element
56
```

```
1
Enter element
56
Enter choice
1
Queue is full
Enter choice
2
10
Enter choice
3
30 23 23 56
Enter choice
1
Queue is full
Enter choice
5
PS C:\Users\syeda\OneDrive\Desktop\competitive-coding>
```