

```

#include <iostream>
#define MAX 10
using namespace std;

struct queue {
    int data[MAX];
    int front, rear;
};

class Queue {
    struct queue q;

public:
    Queue() { q.front = q.rear = -1; }
    int isempty();
    int isfull();
    void enqueue(int);
    int delqueue();
    void display();
};

int Queue::isempty() {
    return (q.front == q.rear) ? 1 : 0;
}

int Queue::isfull() {
    return (q.rear == MAX - 1) ? 1 : 0;
}

void Queue::enqueue(int x) {
    q.data[++q.rear] = x;
}

int Queue::delqueue() {
    return q.data[++q.front];
}

void Queue::display() {
    int i;
    cout << "\n";
    for (i = q.front + 1; i <= q.rear; i++)
        cout << q.data[i] << " ";
}

int main() {
    Queue obj;
    int ch, x;
    do {
        cout << "\n 1.Insert Job\n 2.Delete Job\n 3.Display\n 4. Exit\n Enter your choice: ";
        cin >> ch;
        switch (ch) {
            case 1:
                if (!obj.isfull()) {
                    cout << "\n Enter data: \n";
                    cin >> x;
                    obj.enqueue(x);
                    cout << endl;
                } else
                    cout << "Queue is overflow!!!\n\n";
                break;
            case 2:

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        if (!obj.isEmpty())
            cout << "\n Deleted Element = " << obj.delqueue() << endl;
        else
            cout << "\n Queue is underflow!!!\n\n";
        cout << "\nRemaining Jobs: \n";
        obj.display();
        break;
    case 3:
        if (!obj.isEmpty()) {
            cout << "\n Queue contains: \n";
            obj.display();
        } else
            cout << "\n Queue is empty!!!\n\n";
        break;
    case 4:
        cout << "\n Exiting Program.....";
    }
} while (ch != 4);
return 0;
}

```

/\*-----OUTPUT-----

```

1.Insert Job
2.Delete Job
3.Display
4. Exit
Enter your choice: 1
Enter data:
10

```

```

1.Insert Job
2.Delete Job
3.Display
4. Exit
Enter your choice: 1
Enter data:
20

```

```

1.Insert Job
2.Delete Job
3.Display
4. Exit
Enter your choice: 3
Queue contains:
10 20

```

```

1.Insert Job
2.Delete Job
3.Display
4. Exit
Enter your choice: 2
Deleted Element = 10

```

```

1.Insert Job
2.Delete Job
3.Display
4. Exit
Enter your choice: 3
Queue contains:
20

```

```
1.Insert Job
2.Delete Job
3.Display
4. Exit
Enter your choice: 4
Exiting Program.....
*/
```