

## INPUT:

```
#include<iostream>
#define max 5
using namespace std;

struct queue
{
    int arr[max];
    int front, rear;
}q;

class job
{
public:
    job()
    {
        q.front=-1;
        q.rear=-1;
    }
    int isFull();
    int isEmpty();
    void Enqueue(int);
    string Dequeue();
    void display();
};

int job::isFull()
{
    if(q.rear==max-1)
        return 1;
    else
        return 0;
}

int job::isEmpty()
{
    if(q.front==q.rear)
        return 1;
    else
        return 0;
}

void job::Enqueue(int m)
{
    q.arr[++q.rear]=m;
}

string job::Dequeue()
{
    if(!isEmpty())
    {
        q.front++;
        return(to_string(q.arr[q.front]));
    }
    else
    {
        string t="No";
        return (t);
    }
}
```

```

    }
}
void job::display()
{
    if(!isEmpty())
    {
        cout<<"\nPending Jobs descending in priority:";
        for(int i=q.front+1;i<=q.rear;i++)
            cout<<"\n"<<q.arr[i];
    }
    else
        cout<<"\nNo Jobs Pending.";
}
int main()
{
    job j;
    string temp;
    int ch,n;
    while(true)
    {
        cout<<"\n-----Menu-----";
        cout<<"\n\t1. Add a Job";
        cout<<"\n\t2. Delete a Job";
        cout<<"\n\t3. Display Pending Jobs";
        cout<<"\n\t4. Exit";
        cout<<"\nEnter Your Choice: ";
        cin>>ch;
        switch(ch)
        {
            case 1: if(!j.isFull())
                    {
                        cout<<"\nEnter the Job code: ";
                        cin>>n;
                        j.Enqueue(n);
                    }
                    else
                        {cout<<"\nQueue is Full!";}
                    break;
            case 2: temp=j.Dequeue();
                    if(temp!="No")
                        cout<<"\nJob "<<temp<<" was deleted
successfully!";
                    else
                        cout<<"\nNo Job in Queue!";
                    break;
            case 3: j.display();
                    break;
            case 4: cout<<"\nEnd of program";
                    return (0);
            default: cout<<"\nUnexpected Choice input! Try again...";
        }
    }
}

```

## OUTPUT:

```
-----Menu-----
1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit
```

Enter Your Choice: 1

Enter the Job code: 13

```
-----Menu-----
1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit
```

Enter Your Choice: 1

Enter the Job code: 40

```
-----Menu-----
1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit
```

Enter Your Choice: 1

Enter the Job code: 56

```
-----Menu-----
1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit
```

Enter Your Choice: 3

Pending Jobs descending in priority:

13

40

56

```
-----Menu-----
1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit
```

Enter Your Choice: 2

Job 13 was deleted successfully!

```
-----Menu-----
1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit
```

Enter Your Choice: 2

Job 40 was deleted successfully!

-----Menu-----

1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit

Enter Your Choice: 2

Job 56 was deleted successfully!

-----Menu-----

1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit

Enter Your Choice: 3

No Jobs Pending.

-----Menu-----

1. Add a Job
2. Delete a Job
3. Display Pending Jobs
4. Exit

Enter Your Choice: 4

End of program

[Program finished]