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//=====
// Name      : assign0011.cpp
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// Description : Assignment No.11
//=====
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#include <iostream>
using namespace std;
#define MAX 5

class jobqueue
{
    int a[MAX],front,rear;
public:
    jobqueue()
    {
        front=-1;
        rear=-1;
    }
    void addjob(int);
    int deletejob();
    int isfull();
    int isempty();
    void display();
};

void jobqueue::addjob(int x)
{
    if(isfull()==1)
        cout<<"\nThe queue is FULL. New jobs can't be added !!";
    else
    {
        rear++;
        a[rear]=x;
    }
}

int jobqueue::deletejob()
{
    int value;
    if(isempty()==0)
    {
        cout<<"\nThe queue is EMPTY. No jobs to delete !!";
        return -999;
    }
    else
    {
        front++;
        value=a[front];
        return value;
    }
}

int jobqueue::isfull()
{
    if(rear==MAX-1)
        return 1;
}
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        else
            return 0;
    }
    int jobqueue::isempty()
    {
        if(rear==front)
            return 0;
        else
            return 1;
    }
    void jobqueue::display()
    {
        int x=0;
        cout<<"\nThe queue is: ";
        cout<<" ->";
        for(x=front+1; x<=rear; x++)
        {
            cout<<" "<<a[x];
        }
    }
}

int main()
{
    int choice,x,y;
    char ans;
    jobqueue q1;
    do
    {
        cout<<"\n*****MENU*****";
        cout<<"\nMENU DRIVE";
        cout<<"\n1. Add a job";
        cout<<"\n2. Delete a job";
        cout<<"\n3. Display the job queue";
        cout<<"\nEnter your choice: ";
        cin>>choice;
        switch(choice)
        {
            case 1: cout<<"\n Enter the job : ";
                     cin>>y;
                     q1.addjob(y);
                     q1.display();
                     break;
            case 2: x=q1.deletejob();
                     if(x!=-999)
                         cout<<"\nThe deleted element is: "<<x;
                     q1.display();
                     break;
            case 3: q1.display();
                     break;
            default: cout<<"\nWrong choice!!";
                     break;
        }
        cout<<"\nDo you want to continue(y/n)??";
        cin>>ans;
    }while(ans=='y');

    return 0;
}

```