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--------------------------------------------------------------------------
Assignment Name: Implement linear queue for integer
Class: MCA I
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#include<iostream.h>
#include<conio.h>
#include<process.h>
class queue
{
      int f,r,q[10],n,i;
public:
      queue()
      {
            f=r=0;
      }
      void insert();
      void del();
      void dis();
};

void queue::insert()
{
      if(r==3)
       cout<<"\nOverflow";
      else
      {
       cout<<"\nEnter n";
       cin>>n;
       if(f==0)
          f=1;
          r++;
          q[r]=n;
      }
}

void queue::del()
{
      if(f==0)
      {
            cout<<"\nUnderflow";
            return;
      }
      else
      {
            int n;
            n=q[f];
            if(f==r)
             f=r=0;
            else
             f++;
             cout<<"\nDeleted element is "<<n;
      }
}

void queue::dis()
{
      if(f==0)
       cout<<"\nUnderflow";
      else
      {
       cout<<"\nElements in queue are:";
       for(i=f;i<=r;i++)
         cout<<q[i]<<"\t";
      }
```

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}

void main()
{
    clrscr();
    queue q;
    int ch;
    cout<<"\n 1.insert 2.display 3.delete 4. exit \n";
    while(ch!=4)
    {
        cout<<"\nEnter ch:";
        cin>>ch;
        switch(ch)
        {
            case 1: q.insert(); break;
            case 2: q.dis(); break;
            case 3: q.del(); break;
            case 4:exit(0);
        }
    }
    getch();
}

*/ Output */


 1.insert 2.display 3.delete 4. exit

Enter ch:3

Underflow
Enter ch:1

Enter n10

Enter ch:1

Enter n20

Enter ch:1

Enter n30

Enter ch:1

Overflow
Enter ch:2

Elements in queue are:10        20      30
Enter ch:3

Deleted element is 10
Enter ch:2

Elements in queue are:20        30
Enter ch:4
```