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#include<iostream>
using namespace std;

int cqueue[5];
int front = -1,rear = -1 , n= 5;
void insertCQ(int val)
{
    if((front == 0 && rear == n-1) || (front == rear + 1))
    {
        cout<<"queue is overflow";
        return;
    }
    if(front == -1)
    {
        front=0;
        rear=0;
    }
    else
    {
      if(rear == n-1)
      {
        rear=0;
          }
          else
          {
            rear = rear + 1;
          }

    }
    cqueue[rear]= val;
}
void deleteCQ()
{
    if(front == -1)
    {
        cout<<"Queue is underflow.";
        return;

    }
    cout<<"Deleted elements are : "<<cqueue[front];
    if(front == rear)
    {
        front=-1;
```

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        rear=-1;
    }
    else
    {
        if(front == n-1)
        {
            front=0;
        }
        else
        {
            front= front + 1;
        }
    }
}
void displayCQ()
{
int f = front , r = rear;
    if(front == -1)
    {
        cout<<"Queue is empty.";
        return;
    }
    cout<<"Queue elements are : ";
    if(f <= r)
    {
        while(f<=r)
        {
            cout<<cqueue[f]<<" ";
            f++;
        }
    }
        else
        {
            while(f <= n-1)
            {
                cout<<cqueue[f]<<" ";
            f++;
            }
            f = 0;
                while(f<=r)
        {
            cout<<cqueue[f]<<" ";
            f++;
```

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        }
        }
    }

int main() {

   int ch, val;

   do {
     cout<<"\n1.Insert\n2.Delete\n3.Display\n4.Exit\n";
      cout<<"Enter choice : ";
      cin>>ch;
      switch(ch) {
         case 1:
         cout<<"Enter element: ";
         cin>>val;
         insertCQ(val);
         break;
         case 2:
         deleteCQ();
         break;
         case 3:
         displayCQ();
         break;

      }
   } while(ch != 4);

}
```