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#include<stdio.h>
# define MAX 5
int cqueue_arr[MAX];
int front = -1;
int rear = -1;
void insert(int item)
{
    if((front == 0 && rear == MAX-1) || (front ==
rear+1))
    {
        printf("Queue Overflow n");
        return;
    }
    if(front == -1)
    {
        front = 0;
        rear = 0;
    }
    else {
        if(rear == MAX-1) rear = 0;
        else rear = rear+1;
    }
    cqueue_arr[rear] = item ;
}
void deletion() {
    if(front == -1) {
        printf("Queue Underflown");
        return ;
    }
    printf("Element deleted from queue is :
    %dn",cqueue_arr[front]);
    if(front == rear) {
        front = -1;
```

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front = -1;
rear=-1;
}
else {
if(front == MAX-1) front = 0;
else front = front+1;
}
}
void display()
{
int front_pos = front,rear_pos = rear;
if(front == -1) {
printf("Queue is emptyn");
return;
}
printf("Queue elements :n");
if( front_pos <= rear_pos ) while(front_pos <=
rear_pos)
{
printf("%d ",cqueue_arr[front_pos]);
front_pos++;
}
else {
while(front_pos <= MAX-1)
{
printf("%d ",cqueue_arr[front_pos])
front_pos++;
}
front_pos = 0;
while(front_pos <= rear_pos)
{
printf("%d ",cqueue_arr[front_pos]);
front_pos++;
```

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front_pos++;  
}  
}  
printf("n");  
}  
int main()  
{  
int choice,item;  
do  
{  
printf("1.Insertn");  
printf("2.Deleten");  
printf("3.Displayn");  
printf("Enter your choice : ");  
scanf("%d",&choice);  
switch(choice)  
{  
case 1 : printf("Input the element for  
insertion in queue : ");  
scanf("%d", &item);  
insert(item);  
break;  
case 2 : deletion();  
break;  
case 3: display();  
break;  
case 4: break;  
default: printf("Wrong choicen");  
} }  
while(choice!=4);  
return 0;  
}
```