

```
void enQ()
```

```
{
```

```
    int element;
```

```
    if ((front == 0 && rear == MAX-1) || (front == (rear+1) % MAX))
```

```
        printf("Q is full!\n");
```

```
    else
```

```
    {
```

```
        if (front == -1 && rear == -1)
```

```
            front = 0;
```

```
            rear = (rear+1) % MAX;
```

```
            printf("Enter element: ");
```

```
            scanf("%d", &element);
```

```
            Q[rear] = element;
```

```
        }
```

```
    }
```

```
void deQ()
```

```
{
```

```
    if (rear == -1)
```

```
        printf("Q is empty!");
```

```
    else if (front == rear)
```

```
{  
    printf("Element removed is %.d\n", Q[front]);  
    front = rear = -1;  
}  
else  
{  
    printf("Element removed is %.d\n", Q[front]);  
    front = (front + 1) % MAX;  
}  
}  
void display()  
{  
    if (rear == -1)  
        printf("Q is empty");  
    else if (front <= rear)  
    {  
        for (int i = front; i <= rear; i++)  
            printf("%.d\t", Q[i]);  
        printf("\n");  
    }  
    else  
    {  
        for (int i = front; i < MAX; i++)  
            printf("%.d\t", Q[i]);  
        for (int i = 0; i <= rear; i++)  
            printf("%.d\t", Q[i]);  
        printf("\n");  
    }  
}
```