

Lab 4 - Queue Implementation

```
void insert()
```

```
{
```

```
    int item;
```

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

```
        printf("Queue is full\n");
```

```
    else
```

```
    {
```

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

```
            front = 0;
```

```
            printf("insert the element : ");
```

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

```
            rear = rear + 1;
```

```
            queue[rear] = item;
```

```
        }
```

```
    }
```

```
void display()
```

```
{
```

```
    int i;
```

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

```
        printf("queue is : \n");
```

```
    else
```

```
    {
```

```
        printf("queue is : \n");
```

```
        for (i = front; i <= rear; i++)
```

```
            printf("%d\n", queue[i]);
```

```
        printf("\n");
```

```
    }
```

```
}
```



```
void delete ()
```

```
{
```

```
    if (front == -1 || front > rear)
```

```
    {
```

```
        printf("queue underflow");
```

```
    }
```

```
    else
```

```
    {
```

```
        printf("deleted element is : %.d\n", queue[front]);
```

```
        front = front + 1;
```

```
    }
```

```
}
```