

18M19C5053
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```
#define size 5
int front = -1;
int rear = -1;
int queue[size];
```

```
void enqueue (int n)
{
```

```
    if (front == 0 && rear == size - 1)
    {
```

```
        printf("Queue is full");
    }
```

```
    else if (front == rear rear + 1)
    {
```

```
        printf("Queue is full");
    }
```

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

```
        front++;
        rear++;
        queue[rear] = n;
```

```
    }
    else
    {
```

```
        rear = (rear + 1) % size;
        queue[rear] = n;
```

```
    }
```



```
int dequeue()
{
    if (front == -1 && rear == -1)
    {
        return -1;
    }
    else
    {
        int ele;
        ele = queue[front];
        if (front == rear)
        {
            front = -1;
            rear = -1;
        }
        else
        {
            front = (front + 1) % size;
        }
        return ele;
    }
}
```

```
void display()
{
    if (front == -1 && rear == -1)
    {
        printf("Queue is empty");
    }
}
```



```

else
{
    printf("Queue Contents : \n");
    if (front <= rear)
    {
        for (int i = front; i <= rear; i++)
        {
            printf("%d \n", queue[i]);
        }
    }
}

```

```

else
{
    for (i = 0; i <
    for (i = front; i <= size - 1; i++)
    {
        printf("%d \n");
    }
    for (i = 0; i <= rear; i++)
    {
        printf("%d \n");
    }
}
}
}
}

```

```

}
}

```