

```

#include <stdio.h>
int item, front = 0, rear = -1, q[100], count = 0;
void insertrear()
{
    if (count == 100)
    {
        printf("overflow");
        return;
    }
    rear = rear (rear + 1) % 100;
    q[rear] = item;
    count++;
}

```

```
int deletefront()
```

```
{
```

```
if (count == 0) return -1;
```

```
item = q[front];
```

```
front = (front + 1) % QS;
```

```
count--;
```

```
return item;
```

```
}
```

```
void displayQ()
```

```
{
```

```
int i, f;
```

```
if (count == 0)
```

```
{
```

```
printf("Q is empty \n");
```

```
return;
```

```
}
```

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

```
for (i = 1; i <= count; i++)
```

```
{
```

```
printf("%d \n", q[f]);
```

```
f = (f + 1) % QS;
```

```
}
```

```
}
```

```
void main()
```

```
{
```

```
int n;
```

```
for (i = 1; i <= n; i++)
```

```
{
```

```
printf("\n 1. insertrear \n 2. deletefront
```



```
\n 3: display \n 4: exit \n");  
printf("enter choice : \n");  
scanf("%d", &choice);  
switch(choice)  
{
```

```
    case 1: printf("Enter item");  
            scanf("%d", &item);  
            insertrear();  
            break;
```

```
    case 2: for item = deletefront();  
            if (item == -1)  
                printf("queue is empty \n");  
            else  
                printf("item deleted = %d \n", item);  
            break;
```

```
    case 3: displayf();  
            break;
```

```
    default: return 0;  
}
```

}

}