

```
#include<stdio.h>
```

```
#define QUE_SIZE 3
```

```
int item,front=0,rear=-1,q[10];
```

```
void insertrear()
```

```
{
```

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

```
{
```

```
printf("\n-----\nQUEUE  
OVERFLOW\n-----\n");
```

```
return;
```

```
}
```

```
rear+=1;
```

```
q[rear]=item;  
}
```

```
int deletefront()  
{  
    if(front>rear)  
    {  
        front=0;  
        rear=-1;  
        return -1;  
    }  
    return q[front++];  
}
```

```
void displayQ()  
{  
    int i;  
    if(front>rear)
```

```
{  
    printf("\n-----\nQUEUE  
IS EMPTY\n-----\n");  
    return;  
}  
  
printf("Contents of the queue:\n");  
for(i=front;i<=rear;i++)  
{  
    printf("%d\n",q[i]);  
}  
}
```

```
void main()  
{  
    int choice;  
    for(;;)  
    {  
        printf("\n1:Insert Rear\n2:Delete Front\n3:Display
```

```
Queue\n4:EXIT\n");
```

```
printf("Enter your choice: ");
```

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

```
switch(choice)
```

```
{
```

```
case 1:printf("\nEnter the value to be inserted: ");
```

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

```
insertrear();
```

```
break;
```

```
case 2:item=deletefront();
```

```
if(item== -1)
```

```
printf("\n-----
```

```
\nQUEUE IS
```

```
EMPTY\n-----\n");
```

```
else
```

```
printf("Item Deleted= %d\n",item);
```

```
break;
```

```
case 3:displayQO;
```

```
break;
```

```
default: return;
```

```
}
```

```
}
```

```
}
```