

```
#include<stdio.h>

#define max 5

int front=-1,rear=-1;

int ele,Q[max];

void insert()

{

    if(rear==max-1)

    {

        printf("Overflow!!");

        return;

    }

    printf("Enter element to insert:");

    scanf("%d",&ele);

    if(front=-1)

        front=0;

    rear++;

    Q[rear]=ele;

    printf("Element is inserted!");

}

void delete()

{

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

    {

        printf("Underflow!!");

        return;

    }

    printf("Deleted element:%d",Q[front]);

    front+=1;

    if(front>rear)

    {

        front=-1;
```

```

    rear=-1;
}

}

void display()
{
    int i;
    if(front== -1)
    {
        printf("Underflow!1");
        return;
    }

    printf("Queue elements are:");
    for( i=front;i<=rear;i++)
    {
        printf("%d",Q[i]);
    }
    printf("\n");
}

void main()
{
    int ch;
    do
    {
        printf("Select Queue Operation:\n 1.Insert \n 2.Delete \n 3.Display \n 4.Exit \n Select your choice: \n");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:insert();
            break;
            case 2:delete();
        }
    }
}

```

```
        break;  
    case 3:display();  
        break;  
    case 4:printf("Exiting Program.....\n");  
        break;  
    default: printf("Invaild Choice!!");  
  
}  
}  
  
}
```

OUTPUT:

```
Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
1  
Enter element to insert:21  
Element is inserted!Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
1  
Enter element to insert:33  
Element is inserted!Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
1  
Enter element to insert:66  
Element is inserted!Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
3  
Queue elements are:21 33 66  
Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
2  
Deleted element:21 Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
3  
Queue elements are:33 66  
Select Queue Operation:  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Select your choice:  
4  
Exiting Program.....  
  
Process returned 4 (0x4) execution time : 38.054 s  
Press any key to continue.
```