

```

#include<stdio.h>
int a[10],f=-1,r=-1,i,max,c;
void enqueue();
void dequeue();
void display();
void main()
{
    printf("Enter the max value of queue :");
    scanf("%d",&max);
    do
    {
        printf("\n1.Enqueue\n2.Dequeue\n3.Display\nEnter your choice :");
        scanf("%d",&c);
        switch(c)
        {
            case 1:enqueue();
            break;
            case 2:dequeue();
            break;
            case 3:display();
            break;
            case 4:
            break;
            default:printf("Invalid choice");
        }
    }while(c!=4);
}
void enqueue()
{
    if(r==max-1)
    {
        printf("Overflow");
    }
    else if(f==--1&&f==--1)
    {
        f=0;
        r=0;
        printf("Enter the element :");
        scanf("%d",&a[f]);
    }
    else
    {
        r=r+1;
        printf("Enter the element ");
    }
}

```

```

        scanf("%d",&a[r]);
    }
}
void dequeue()
{
    int temp,p=0;
    if(f== -1)
    {
        printf("Underflow");
    }
    else if(f==r)
    {
        printf("Delted element is is %d",a[f]);
        f=-1;
        r=-1;
    }
    else
    {
        temp=a[f];
        for(i=f+1;i<=r;i++)
        {
            if(temp<a[i])
            {
                temp=a[i];
                p=i;
            }
        }
        printf("Deleted element is %d",temp);
        for(i=p;i<r;i++)
        {
            a[i]=a[i+1];
        }
        r=r-1;
    }
}
void display()
{
    if(f== -1 && r== -1)
    {
        printf("Queue is empty");
    }
    else
    {

```

```
        for(i=f;i<=r;i++)
        {
            printf("%d\t",a[i]);
        }
    }
```