

```
#include<stdio.h>
#include<stdlib.h>
#define Max 5
int q[Max];
int f,r;
void create()
{ f=r=-1;
}
void check(int a)
{
    int i,j;
    for(i=0;i<=r;i++)
    {
        if(a>=q[i])
        {
            for(j=r+1;j>i;j--)
            {
                q[j]=q[j-1];
            }
            q[i]=a;
            return;
        }
    }
    q[i]=a;
}
void insert()
{
    if(r>=Max-1){
        printf("overflow error \n");
    }
    int a;
    printf("\n enter value :");
    scanf("%d",&a);
    if((f==-1)&&(r==-1))
    {
        f++;
    }
}
```

```

        r++;
        q[r]=a;
        return;
    }
    else
        check(a);
    r++;
}

void delete()
{
    int a;
    printf("\nenter value to delete :");
    scanf("%d",&a);
    int i;
    if((f==-1)&&(r==-1))
    {
        printf("underflow error");
        return;
    }
    for(i=0;i<=r;i++)
    {
        if(a==q[i])
        {
            for(;i<r;i++)
            {
                q[i]=q[i+1];
            }
            q[i]=-99;
            r--;
            if(r==-1)
                f=-1;
            return;
        }
    }
    printf("\n %d element not found to delete ",a);
}

```

```
void display()
{
    if((f==-1) &&(r==-1))
    {
        printf("\n empty queue");
        return;
    }
    for(;f<=r;f++)
    {
        printf("%d  ",q[f]);
    }
    f=0;
}
```

```
void main()
{
    int n,ch;
    printf("\n1-insert\n2-delete\n3-display\n4-exit\n");
    create();
    while(1)
    {
        printf("\n enter your choice :");
        scanf("%d",&ch);

        switch(ch)
        {
            case 1:
                insert();
                break;

            case 2:
                delete();
                break;
```

```
void main()
{
    int n,ch;
    printf("\n1-insert\n2-delete\n3-display\n4-exit\n");
    create();
    while(1)
    {
        printf("\n enter your choice :");
        scanf("%d",&ch);

        switch(ch)
        {
            case 1:
                insert();
                break;

            case 2:
                delete();
                break;

            case 3:
                display();
                break;

            case 4:
                exit(0);
        }
    }
}
```