```c
#include<stdio.h>
#include<conio.h>
#include<process.h>
int item;
int r=-1;
int f=0;
int n;
int q[10];
void insertrear()
{
    if(r==(n-1))
    {
        printf("QUEUE OVERFLOW\n");
        return;
    }
    printf("ENTER THE ITEM TO BE INSERTED\n");
    scanf("%d",&item);
    r=r+1;
    q[r]=item;
}
void deletefront()
{
    if(f>r)
    {
        printf("THE QUEUE IS EMPTY\n");
        f=0;
        r=-1;
    }
    else
    printf("THE ITEM DELETED IS =%d\n",q[f++]);
}
void display()
{
    int i;
    if(f>r)
    {
```

```c
}
void display()
{
    int i;
    if(f>r)
    {
        printf("THE QUEUE IS EMPTY\n");
        return;
    }
    else
    {
    printf("THE CONTENTS OF THE QUEUE IS=   ");
    for(i=f;i<=r;i++)
    {
        printf("%d\t",q[i]);
    }
    printf("\n");
    }
}
int main()
{
    int c,i;
    printf("ENTER THE SIZE OF QUEUE\n");
    scanf("%d",&n);
    while(i!=4)
    {
        printf("1-INSERT   2-DELETE   3-DISPLAY 4-EXIT\n");
        printf("ENTER THE CHOICE\n");
        scanf("%d",&c);
        switch(c)
        {
            case 1:
                    insertrear();
                    break;
```

```c
}
}
int main()
{
    int c,i;
    printf("ENTER THE SIZE OF QUEUE\n");
    scanf("%d",&n);
    while(i!=4)
    {
        printf("1-INSERT   2-DELETE   3-DISPLAY 4-EXIT\n");
        printf("ENTER THE CHOICE\n");
        scanf("%d",&c);
        switch(c)
        {
            case 1:
                    insertrear();
                    break;
            case 2:
                    deletefront();
                    break;
            case 3:
                    display();
                    break;
            case 4:
                    exit(0);
              default:
                    printf("INVALID CHOICE");
                }
        }
    }
```

```
ENTER THE SIZE OF QUEUE
3
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
ENTER THE CHOICE
1
ENTER THE ITEM TO BE INSERTED
23
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
ENTER THE CHOICE
1
ENTER THE ITEM TO BE INSERTED
23
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
ENTER THE CHOICE
1
ENTER THE ITEM TO BE INSERTED
29
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
ENTER THE CHOICE
1
QUEUE OVERFLOW
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
ENTER THE CHOICE
3
THE CONTENTS OF THE QUEUE IS=  23        23        29
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
ENTER THE CHOICE
2
THE ITEM DELETED IS =23
1-INSERT  2-DELETE  3-DISPLAY 4-EXIT
```

1
QUEUE OVERFLOW
1-INSERT 2-DELETE 3-DISPLAY 4-EXIT
ENTER THE CHOICE
3
THE CONTENTS OF THE QUEUE IS= 23   23   29
1-INSERT 2-DELETE 3-DISPLAY 4-EXIT
ENTER THE CHOICE
2
THE ITEM DELETED IS =23
1-INSERT 2-DELETE 3-DISPLAY 4-EXIT
ENTER THE CHOICE
3
THE CONTENTS OF THE QUEUE IS= 23   29
1-INSERT 2-DELETE 3-DISPLAY 4-EXIT
ENTER THE CHOICE