```
#include<stdio.h>
#include<stdlib.h>
#define max 5
int insertq ( int queue[max], int *rear , int *data,int *front)
{
if ( *rear == max -1 )
return(-1);
else
{     if(*front==-1)
*front=0;
*rear = *rear + 1;
queue[*rear] = *data;
return(1);
}
}
int delq( int queue[max], int *front, int *rear)
{

if ( *front == *rear)
return(-1);
else
{


printf("deleted:%d",queue[*front]);
(*front)++;
if(*front==*rear)
*front=*rear=-1;
return(1);
```

```
}
}
void display(int queue[max],int *front,int
*rear)
{
int i;
if(*rear==-1)
printf("Queue is empty\n");
else
{
printf("\n Queue contents:");
for(i=*front;i<=*rear;i++)
printf("%d", queue[i]);
}
}
int main()
{
int queue[max],data,i;
int front,rear,reply,option;
front =-1;
rear = -1;
printf("\tMenu");
printf("\n-------------------------");
printf("\n 1. Insert element in queue");
printf("\n 2. Delete element from queue");
printf("\n 3.Display");
printf("\n 4. Exit");
printf("\n-------------------------");
do
{
printf("\nChoose operation : ");
scanf("%d",&option);
switch(option)
{
case 1 :
printf("\nEnter Number : ");
```

```
scanf("%d",&data);
reply = insertq(queue,&rear,&data,&front);
if ( reply == - 1)
printf("Queue is full");
break;
case 2 :
reply = delq(queue,&front,&rear);
if ( reply == -1 )
printf("Queue is empty ");
break;
case 3:
display(queue,&front,&rear);
break;

case 4 : exit(0);
}
}while(option!=4);
}
```

```
        Menu
----------------------------
 1. Insert element in queue
 2. Delete element from queue
 3.Display
 4. Exit
----------------------------
Choose operation : 1

Enter Number : 12

Choose operation : 1

Enter Number : 24

Choose operation : 3

 Queue contents:12      24
Choose operation : 2
deleted:12
Choose operation : 3
Queue is empty

Choose operation : 4
```