```
#include <stdio.h>
#include <stdlib.h>
#define 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");
else
{ printf ("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 ("\n Menu");
printf ("\n ------");
printf ("\n 1. Insert");
printf ("\n 2. Delete");
printf ("\n 3. Display");
Printf ("\n 4. Exit");
do
{
  printf ("Choose opr");
  scanf ("%d", &option);
  switch (option)
  {
    case 1:
      printf ("\n Enter no:");
      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);
}
```