```
#include <stdio.h>
#include<stdlib.h>
#define MAX 50
void insert();
void delete();
void display();
int queuearray[MAX];
int rear = - 1;
int front = - 1;
void main()
{
   int choice;
   while (1)
   {
      printf("1.Insert element to queue \n");
      printf("2.Delete element from queue \n");
      printf("3.Display all elements of queue \n");
      printf("4.Quit \n");
      printf("Enter your choice : ");
      scanf("%d", &choice);
      switch (choice)
      {
         case 1:
         insert();
         break;
         case 2:
```

```
            delete();
            break;
            case 3:
            display();
            break;
            case 4:
            exit(0);
            default:
            printf("Wrong choice \n");
        }
    }
}

void insert()
{
    int additem;
    if (rear == MAX - 1)
    printf("Queue Overflow \n");
    else
    {
        if (front == - 1)
         front = 0;
        printf("Inset the element in queue : ");
        scanf("%d", &additem);
        rear = rear + 1;
        queuearray[rear] = additem;
```

```
    }
}

void delete()
{
    if (front == - 1 || front > rear)
    {
        printf("Queue Underflow \n");
        return ;
    }
    else
    {
        printf("Element deleted from queue is : %d\n", queuearray[front]);
        front = front + 1;
    }
}

void display()
{
    int i;
    if (front == - 1)
        printf("Queue is empty \n");
    else
        {
        printf("Queue is : \n");
        for (i = front; i <= rear; i++)
```

```
            printf("%d ", queuearray[i]);
        printf("\n");
    }


}
```