

```
#include <stdio.h>
```

```
#define MAX 50
```

```
void insert();
```

```
void delete();
```

```
void display();
```

```
int queue-array[MAX];
```

```
int rear = -1;
```

```
int front = -1;
```

```
main()
```

```
{
```

```
    int choice;
```

```
    while(1)
```

```
    {
```

```
        printf("1. Insert element to queue\n");
```

```
        printf("2. Delete\n");
```

```
        printf("3. Display\n");
```

```
        printf("4. Quit\n");
```

```
    }
```

Take the choice from user.

```
switch(choice)
```

Take choice and store it in

switch case

```
{
```

```
void insert()
```

```
{
```

```
    int add-item;
```

```
    if (rear == MAX - 1)
```

```
        printf("overflow");
```

```
    else
```

```
    {
```

```
        if (front == -1)
```

```
            front = 0;
```

```
            printf("Insert an element in queue");
```

```
            scanf("%d", &add-item);
```

```
            rear = rear + 1;
```

```
            queue-array[rear] = add-item
```

```
    }
```

```
void delete()
```

```
{
```

```
    if (front == -1 || front > rear)
```

```
    {
```

```
        printf("underflow");
```

```
    } else
```

```
    {
```

```
        printf("Element deleted from queue is %d",
```

```
            queue-array[front]);
```

```
        front = front + 1;
```

```
    }
```



```
void display()
```

```
{
```

```
    int i;
```

```
    if (front == -1)
```

```
        printf("empty");
```

```
    else {
```

```
        printf("Queue is ");
```

```
        for (i = front; i <= rear; i++)
```

```
            printf("%d", queue-array[i]);
```

```
        printf("\n");
```

```
    }
```