

```

#include <stdio.h>

#define MAX 100

int queue[MAX];
int front = -1;
int rear = -1;

void enqueue(int x) {
    if (rear == MAX - 1) {
        printf("Queue Overflow\n");
    }
    else {
        if (front == -1)
            front = 0;
        rear++;
        queue[rear] = x;
        printf("%d enqueued\n", x);
    }
}

void dequeue() {
    if (front == -1 || front > rear) {
        printf("Queue Underflow\n");
    }
    else {
        printf("%d dequeued\n", queue[front]);
        front++;
    }
}

void peek() {
    if (front == -1 || front > rear) {
        printf("Queue is Empty\n");
    }
    else {
        printf("Front element is %d\n", queue[front]);
    }
}

void display() {
    if (front == -1 || front > rear) {
        printf("Queue is Empty\n");
    }
}

```

```
    else {  
        printf("Queue elements are:\n");  
        for (int i = front; i <= rear; i++) {  
            printf("%d ", queue[i]);  
        }  
        printf("\n");  
    }  
}
```

```
int main() {  
    enqueue(10);  
    enqueue(20);  
    enqueue(30);  
  
    peek();  
    display();  
  
    dequeue();  
    peek();  
  
    return 0;  
}
```