

```
#include <stdio.h>

#define MAX 5

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

void insert() {
    int item;
    if (rear == MAX - 1) {
        printf("Queue Overflow! Cannot insert.\n");
    } else {
        printf("Enter the element to insert: ");
        scanf("%d", &item);

        if (front == -1)
            front = 0;

        rear++;
        queue[rear] = item;
        printf("Inserted %d into the queue.\n", item);
    }
}

void delete() {
    if (front == -1 || front > rear) {
        printf("Queue Underflow! Queue is empty.\n");
    } else {
        printf("Deleted element: %d\n", queue[front]);
        front++;
        if (front > rear)
```

```
    front = rear = -1;
}

}

void display() {
    if (front == -1) {
        printf("Queue is empty.\n");
    } else {
        printf("Queue elements are: ");
        for (int i = front; i <= rear; i++) {
            printf("%d ", queue[i]);
        }
        printf("\n");
    }
}

int main() {
    int choice;

    while (1) {
        printf("\n--- Queue Operations ---\n");
        printf("1. Insert\n");
        printf("2. Delete\n");
        printf("3. Display\n");
        printf("4. Exit\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1: insert(); break;
            case 2: delete(); break;
        }
    }
}
```

```
case 3: display(); break;  
case 4: return 0;  
default: printf("Invalid choice! Please try again.\n");  
}  
}  
}
```

```
--- Queue Operations ---  
1. Insert  
2. Delete  
3. Display  
4. Exit  
Enter your choice: 1  
Enter the element to insert: 10  
Inserted 10 into the queue.  
  
--- Queue Operations ---  
1. Insert  
2. Delete  
3. Display  
4. Exit  
Enter your choice: 1  
Enter the element to insert: 11  
Inserted 11 into the queue.
```

```
--- Queue Operations ---  
1. Insert  
2. Delete  
3. Display  
4. Exit  
Enter your choice: 3  
Queue elements are: 10 11  
  
--- Queue Operations ---  
1. Insert  
2. Delete  
3. Display  
4. Exit  
Enter your choice: 2  
Deleted element: 10
```