

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

```
#define MAX 5
```

```
int front = 0;
```

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

```
int queue[MAX];
```

```
void Enqueue(int);
```

```
int Dequeue();
```

```
void Display();
```

```
int main()
```

```
int {
```

```
    int option;
```

```
    int item;
```

```
    do {
```

```
        printf("In 1. Insert to Queue);
```

```
        printf("In 2. Delete from Queue In 3. Display  
the content In 4. Exit In");
```

```
        printf("Enter the option:");
```

```
        scanf("%d", &option);
```

```
        switch(option)
```

```
        {
```

```
            case 1: printf("Enter the element In");
```

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

```
                    Enqueue(item);
```

```
                    break;
```

```
            case 2: item = Dequeue();
```

```
                    if (item == -1)
```

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

```
                    else
```

```
                        printf("Removed element from
```

```
queue %d", item);
```

```
                    break;
```

```

    case 3: Display();
              break;
    case 4: exit(0);
  }
} while (option != 4);
return 0;
}

```

```

void Enque (int ele)
{

```

```

    if (rear == MAX - 1)
        printf("Queue is full\n");
    else
    {
        rear++;
        queue[rear] = ele;
    }
}

```

```

int Deque ()
{

```

```

    int item;
    if (front == -1)
        return -1;
    else

```

```

    {
        item = queue[front];
        front++;
        if (front > rear)
        {
            front = -1;
            rear = -1;
        }
        return item;
    }
}

```

```

void Display ()
{

```

```

    int i;

```

```

    if (front == -1)

```

```

        printf("Queue is empty\n");
    else
    {
        printf("Queue contains\n");
        for (i = front; i <= rear; i++)
            printf("%d ", queue[i]);
    }
}

```

```

    }
}

```

```

    for (i = front; i <= rear; i++) printf("%d ", queue[i]);
}
}

```