

## 18.queue :-

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

```
#define SIZE 5
```

```
void enQueue(int);
```

```
void deQueue();
```

```
void display();
```

```
int items[SIZE], front = -1, rear = -1;
```

```
int main() {
```

```
    deQueue();
```

```
    enQueue(1);
```

```
    enQueue(2);
```

```
    enQueue(3);
```

```
    enQueue(4);
```

```
    enQueue(5);
```

```
    enQueue(6);
```

```
    display();
```

```
    deQueue();
```

```
    display();
```

```
    return 0;
```

```
}
```

```
void enQueue(int value) {
```

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

```
    printf("\nQueue is Full!!");
else {
    if (front == -1)
        front = 0;
    rear++;
    items[rear] = value;
    printf("\nInserted -> %d", value);
}
}
```

```
void deQueue() {
    if (front == -1)
        printf("\nQueue is Empty!!");
    else {
        printf("\nDeleted : %d", items[front]);
        front++;
        if (front > rear)
            front = rear = -1;
    }
}
```

```
void display() {
    if (rear == -1)
        printf("\nQueue is Empty!!!");
    else {
        int i;
        printf("\nQueue elements are:\n");
        for (i = front; i <= rear; i++)
            printf("%d ", items[i]);
    }
    printf("\n");
}
```

