

**Problem statement**[Send feedback](#)

You have been given an integer array/list(ARR) of size 'N'. It only contains 0s, 1s and 2s. Write a solution to sort this array/list.

**Note :**

Try to solve the problem in 'Single Scan'. 'Single Scan' refers to iterating over the array/list just once or to put it in other words, you will be visiting each element in the array/list just once.

**Detailed explanation** ( Input/output format, Notes, Images )**Constraints :**

```
1 <= T <= 10
1 <= N <= (5 * (10 ^ 5))
0 <= ARR[i] <= 2
```

Where 'N' is the size of the given array/list.

And, ARR[i] denotes the i-th element in the array/list.

Time Limit: 1sec

**Sample Input 1 :**

```
2
6
0 1 2 2 1 0
7
0 1 2 1 2 1 2
```

**Sample Output 1 :**

```
0 0 1 1 2 2
0 1 1 1 2 2 2
```

**Sample Input 2 :**

```
2
7
2 2 2 1 1 1 0
6
2 1 2 0 1 0
```

**Sample Output 2 :**

```
0 1 1 1 2 2 2
0 0 1 1 2 2
```