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rudhran\_b\_2020\_1 ▾

[All Contests](#) > [PL-2022-Lab-10](#) > [PL-2020-C-Sort it out!](#)

# PL-2020-C-Sort it out!

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Problem

Submissions

Leaderboard

Discussions

You are given an array  $A$  of non-negative integers of size  $m$ . Your task is to sort the array in non-decreasing order and print out the original indices of the new sorted array.

Example:

$A = \{4, 5, 3, 7, 1\}$

After sorting the new array becomes  $A = \{1, 3, 4, 5, 7\}$ .

The required output should be "4 2 0 1 3"

## Input Format

The first line of input consists of the size of the array The next line consists of the array of size  $m$

## Constraints

$1 \leq m \leq 10^6$   $0 \leq A[i] \leq 10^6$

NOTE: The indexing of the array starts with 0.

## Output Format

Output consists of a single line of integers

## Sample Input 0

```
5
4 5 3 7 1
```

## Sample Output 0

```
4 2 0 1 3
```

## Sample Input 1

```
10
7 5 4 3 2 1 8 0 9 6
```

## Sample Output 1

```
7 5 4 3 2 1 9 0 6 8
```

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Submissions: 622

Max Score: 100

Difficulty: Medium

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C



```
1 #include <stdio.h>
2 #include <string.h>
3 #include <math.h>
4 #include <stdlib.h>
5
6 int main() {
7
8     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
9     int n,k;
10    scanf("%d",&n);
11    int arr[n];
12    int new[n];
13    int array[n];
14    for(int a=0;a<n;a++)
15    {
16        scanf("%d",&arr[a]);
17        array[a]=arr[a];
18    }
19    for(int i=0;i<n-1;i++)
20    {
21        for(int j=0;j<n-i-1;j++)
22        {
23            if(arr[j]>arr[j+1])
24            {
25                int t=arr[j];
26                arr[j]=arr[j+1];
27                arr[j+1]=t;
28            }
29        }
30    }
31    for(int i=0;i<n;i++)
32    {
33        for(int j=0;j<n;j++)
34        {
35            if(arr[i]==array[j])
36            {
37                new[i]=j;
38            }
39        }
40    }
41    for(int b=0;b<n;b++)
42    {
43        printf("%d ",new[b]);
44    }
45    return 0;
46 }
47
48
49
```

Line: 1 Col: 1

 Upload Code as File ☐ Test against custom input

Run Code

Submit Code