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:

The first line of input consists of the size of the array

The next line consists of the array of size m

OUTPUT:

Output consists of a single line of integers

CONSTRAINTS:

1<=m<=10⁶

 $0 <= A[i] <= 10^6$

NOTE: The indexing of the array starts with 0.

SAMPLE INPUT

5

4 5 3 7 1

SAMPLE OUTPUT

4 2 0 1 3