

SORT FREQUENCY OF INTEGER GRADO 11

Sort Frequency of Integers

Code a program that reads a unidimensional array of integers and prints in descending order the frequency of the integers in the array.

Input: A sequence of integer numbers where the first one is a positive integer that represents the amount of numbers in the rest of the line.

Output:

The frequencies of the input numbers sorted in descending order.

Input

9 4 80 80 30 4 4 80 4 4

Output

5 3 1

Example

Input:

4 5 5 5 5

Output:

4

Note that the first number in the input, 9, indicates the size of the array. Also, note that 80 appears 3 times; 30, once; and 4, five times.