# 03. Numbers

Write a program to **read a sequence of integers** and find and print the **top 5** numbers that are **greater than the average** value in the sequence, sorted in descending order.

## Input

Read from the console a single line holding space separated number.

## Output

Print the above described numbers on a single line, space separated. If **less than 5 numbers** hold the above mentioned property, print less than 5 numbers. Print “**No**” if no numbers hold the above property.

## Constraints

All input numbers are integers in range [-1 000 000 … 1 000 000]. The count of numbers is in range [1…10 000].

## Examples

|  |  |  |
| --- | --- | --- |
| **Input JavaScript** | **Output** | **Comments** |
| '10 20 30 40 50' | 50 40 | Average number = 30.  Numbers greater than 30 are: {40, 50}.  The top 5 numbers among them in descending order are: {50, 40}.  Note that we have only 2 numbers, so all of them are included in the top 5. |
| '5 2 3 4 -10 30 40 50 20 50 60 60 51' | 60 60 51 50 50 | Average number = 28.08.  Numbers greater than 20.078 are: {30, 40, 50, 50, 60, 60, 51}.  The top 5 numbers among them in descending order are: {60, 60, 51, 50, 50}. |
| '1' | No | Average number = 1.  There are no numbers, greater than 1. |
| '-1 -2 -3 -4 -5 -6' | -1 -2 -3 | Average number = -3.5.  Numbers greater than -3.5 are: {-1, -2, -3}.  The top 5 numbers among them in descending order are: {-1, -2, -3}. |

function numbers(input) {

    let arr = [input]

    let newArr = arr.toString().split(` `).map(Number)

    let sum = 0;

    let count = 0

    for (let i = 0; i < newArr.length; i++) {

        sum += newArr[i];

        count++

    }

    let average = (sum / count).toFixed(2);

    let greaterArr = [];

    for (let i = 0; i < newArr.length; i++) {

        if (newArr[i] > average) {

            greaterArr.push(newArr[i])

        }

    }

    let result = greaterArr.sort((a, b) => b - a).slice(0, 5);

    console.log(result.join(` `))

    if (result.length < 1 || result == undefined) {

        console.log(`No`)

    }

}

numbers(`1`)

SECOND SOLUTION

function solve(input) {

    input = input.split(` `).map(Number)

    let sum = input.reduce((acc, c) => acc + c)

    let average = sum / input.length;

    let greater = input.filter(el => el > average);

    let sorted = greater.sort((a, b) => b - a)

    if (sorted.length > 0) {

        console.log(sorted.slice(0, 5).join(` `))

    } else {

        console.log(`No`)

    }

}

solve('5 2 3 4 -10 30 40 50 20 50 60 60 51')