# 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** | **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}. |

|  |  |  |
| --- | --- | --- |
| **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}. |

package com.company;  
  
import javax.swing.\*;  
import java.util.ArrayList;  
import java.util.Collections;  
import java.util.List;  
import java.util.Scanner;  
  
public class Main {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.*in*);  
  
 String[] numbersAsText = scanner.nextLine().split(" ");  
 List<Integer> numbers = new ArrayList<>();  
  
 int sum = 0;  
 int currentNum = 0;  
 boolean isFound = false;  
  
 for (int i = 0; i < numbersAsText.length; i++) {  
 int number = Integer.*parseInt*(numbersAsText[i]);  
 numbers.add(number);  
 sum += number;  
 currentNum++;  
 }  
  
 double averageSum = sum \* 1.0 / currentNum;  
  
 Collections.*sort*(numbers);  
 Collections.*reverse*(numbers);  
  
 int count = 0;  
 for (int i = 0; i < numbers.size(); i++) {  
 if (numbers.get(i) > averageSum) {  
 isFound = true;  
 System.*out*.print(numbers.get(i) + " ");  
 count++;  
 if (count == 5) {  
 break;  
 }  
 }  
 }  
  
 if (!isFound) {  
 System.*out*.println("No");  
 }  
 }  
}