

Problem 1:

Function that takes a number and return the left most digit of it.

Example 1:

Input: 432

Output: 4

Example 2:

Input: 12

Output: 1

Problem 2:

Create a program that takes an array count how many positive numbers, negative numbers, even numbers and odd numbers (By same order as written) (0 is not counted as positive or negative but it's counted as an even number).

Example 1:

Input: [5, 7, -2, 0, 4, -8, -3, 6]

Output:

Positive: 4
Negative: 3
Even: 5
Odd: 3

Example 2:

Input: [0, 2, 4, 6]

Output:

Positive: 3
Negative: 0
Even: 4
Odd: 0

Problem 3:

Create a function that take array as an input this array may contains numbers or strings return the array contains only integers.

Example 1:

Input: [1, NaN, 2, 'a', 'aba']

Output: [1, 2]

Example 2:

Input: ['Ahmed', 12, 'Mohamed', 34, 'Mahmoud', 12, 54]

Output: [12, 34, 12, 54]

Problem 4:

Implement slice() function. Function that takes an array and perform the same thing that .slice() do.

Problem 5:

Create a function that takes an array of arrays with numbers. Return a new single array with the largest numbers of each.

Example 1:

Input: [[1, 2, 3, 4], [45, 73, 12], [13, 13, 10]]

Output: [4, 73, 13]

Problem 6:

Given a string S. Print the origin string if it's not too long otherwise, print special abbreviation.

Note: The string is called too long, if its length is strictly more than 10 characters. If the string is too long then you have to print the string in the following manner:

- Print the first character in the string.
- Print number of characters between the first and the last characters
- Print the last character in the string

Example 1:

Input: word

Output: word

Example 2:

Input: internationalization

Output: i18n

Example 3:

Input: pneumonoultramicroscopicsilicovolcanoconiosis

Output: p43s

Problem 7:

Function takes a string consisting of 4 characters determine if S consists of exactly two kinds of characters. Check if the string has exactly two different characters in which each of them appear two times in the string.

Example 1:

Input: ASSA

Output: True

Example 2:

Input: STTO

Output: False

Example 3:

Input: FFEE

Output: True

Problem 8:

You will be given the final shape of an X O game you need to define which of the players win (x or o).

Example 1:

Input:

X	O	X
X	O	O
X	X	O

Output: X

Example 2:

Input:

X	X	O
O	O	X
O	X	O

Output: O

Problem 9:

Create a function that takes an array and a character that returns the first and the last index of this character.

Example 1:

Input: ['h', 'e', 'l', 'l', 'o'] 'l'

Output: [2, 3]

Example 2:

Input: ['c','i','r','c','u','m','l','o','c','u','t','i','o','n','n','n'] 'c'

Output: [0, 8]

Problem 10:

Function gets an array and a number check if this number can be obtained by adding some consecutive elements in this array.

Example 1:

Input: [1, 2, 3, 4, 5] 7

Output: True $\rightarrow (3 + 4 = 7)$

Example 2:

Input: [1, 2, 3, 4, 5] 10

Output: True $\rightarrow (1 + 2 + 3 + 4 = 10)$