

[Home](#)

Tartalomjegyzék

- [1 Exercises](#)
 - ◆ [1.1 List first](#)
 - ◆ [1.2 List end](#)
 - ◆ [1.3 Perfect numbers](#)
 - ◆ [1.4 Separate](#)
 - ◆ [1.5 Elmax](#)
 - ◆ [1.6 Argmax](#)
 - ◆ [1.7 Multiply](#)
 - ◆ [1.8 Remove Duplicate](#)
 - ◆ [1.9 Intersect](#)
 - ◆ [1.10 Odd Component](#)

Exercises

List first

Write a python program that returns the first element of a list, if there is any, and `None` if the list is empty. The program should return the first element or a special `None` value.

List end

Write a program that returns the last c -part of a list!

If the list is shorter than c then return a `None` value. Otherwise return the list of the last c elements.

Perfect numbers

Write a program which evaluates whether a number is perfect.

Separate

Let L be a list of numbers, write a function that separates its elements into two lists: one for positive and one for non-positive elements. For example

$$L = [-1, 2, 5, -2, 3, -4, -5, 2, -2, 0, 5, 5, 6, 3, -3]$$

Then the result should be two lists.

Elmax

Write a program that finds the largest value in a list and returns the value.

Argmax

Write a program that finds the largest value in a list and returns the index of that element.

The function should be called `argmax`, should have one parameter: l the list of numbers.

The function should return the index of the largest element. For example `[3, 2, 1]` should result 0.

Multiply

We have two parameters: a list of numbers l and an additional number k . The output should be a list where every number is k times the corresponding number in l .

Remove Duplicate

Write a python program that remove any duplicate value in a list and return a new list with contains no duplicate.

Intersect

Given two lists. Write a python program that returns true if there is the same value in both lists and returns false otherwise.

Odd Component

Given a list. write a python program which takes all odd values in the list and returns the odd list.