

Ex1: Write a program to create function calculation() such that it can accept two variables and calculate addition and subtraction. Also, it must return both addition and subtraction in a single return call.

Ex2: Write a program that prints the inner product of two vectors, this must be done using multiple functions as follow:

- a- A function that takes a dimension of vector from the user, i.e number of rows.
- b- A function that takes from user the elements of both vectors (X and Y)
- c- The function 'compute' that computes the inner product
- d- The function 'printer' that prints the inner product value of these two vectors, note that if they are orthogonal it must state this by printing a note. E.g: "X and Y are orthogonal".

Ex3: Write a function that finds the factorial of a number n.

Ex4 (Ex1Lab07): Write a program that receives a sequence of integer numbers (ends with an empty line) and calculate the alternate sum of the elements. Example: **1 4 9 16 9 7 4 9 11**, the result will be **1 - 4 + 9 - 16 + 9 - 7 + 4 - 9 + 11 = -2**.

Steps:

A function that takes the elements as input from the user and returns a list of its numbers.

A function that computes the alternate sum and prints it.

Ex5: Write a function sum_without_smallest(v) that takes a list as parameter and return the sum of elements without the smallest number. Note: Try to deal with the case where there is a duplication of the minimum.