

Lab: Functions Advanced

This document defines the exercises for the ["Python Advanced" course at @Software University](#).

Please submit your solutions (source code) to all the below-described problems in [Judge](#).

1. Multiplication Function

Write a function **called multiply** that can receive any quantity of numbers (integers) as different parameters and **returns the result** of the multiplication of all of them. Submit **only your function** in the Judge system.

Examples

Test Code	Output
<pre>print(multiply(1, 4, 5)) print(multiply(4, 5, 6, 1, 3)) print(multiply(2, 0, 1000, 5000))</pre>	<pre>20 360 0</pre>

2. Person Info

Write a function **called get_info** that receives a **name**, an **age**, and a **town** and **returns** a string in the format: **"This is {name} from {town} and he is {age} years old"**. Use dictionary unpacking when testing your function. Submit **only the function** in the judge system.

Examples

Test Code	Output
<pre>print(get_info(**{"name": "George", "town": "Sofia", "age": 20}))</pre>	<pre>This is George from Sofia and he is 20 years old</pre>

3. Cheese Showcase

Write a function **called sorting_cheeses** that receives **keywords arguments**:

- The **key** represents the **name** of the cheese
- The **value** is a **list of quantities** (integers) of the **pieces** of the given cheese

The function should **return** the **cheeses** and their pieces' **quantities sorted by the number of pieces** of a cheese kind in **descending** order. If two or more cheeses have the **same number of pieces**, sort them by **their names in ascending order (alphabetically)**. For **each kind of cheese**, return their **piece quantities** in **descending** order.

For more clarifications, see the examples below.

Examples

Input	Output
<pre>print(sorting_cheeses(Parmesan=[102, 120, 135], Camembert=[100, 100, 105, 500, 430], Mozzarella=[50, 125],))</pre>	<pre>Camembert 500 430 105 100 100 Parmesan 135</pre>

6. Operate

Write a function **called operate** that receives an operator ("**+**", "**-**", "*****" or "**/**") as a first argument and multiple numbers (integers) as additional arguments (***args**). The function should **return the result** of the operator applied to all the numbers. For more clarification, see the examples below.

Submit **only your function** in the Judge system.

Note: Be careful when you have multiplication and division

Examples

Test Code	Output	Comment
<code>print(operate("+", 1, 2, 3))</code>	6	1 + 2 + 3 = 6
<code>print(operate("*", 3, 4))</code>	12	3 * 4 = 12