TCSS141A – SPRING 2021 – ASSIGNMENT FOR WEEK 8; max 15 points

DUE: Sun 05/23 @ 11:30pm, the assignment has to be submitted to the CANVAS

The name of the file: (your) lastname_hw7.py

Please start the program with: # your name

In the program you can use only methods and tools already introduced in the class!

PROBLEM: Practice of operations

Introduction

We know that in Python the symbol // represents integer division, and the symbol % represents the remainder after division.

Example: 17//5=3 and 17%5=2 (because 17=5*3+2)

Terminology:

- The value 17 is called dividend and it can be any integer.
- The value 5 is called divisor and it can be any positive integer.
- The value 3 is called quotient and it can be any integer.
- The value 2 is called remainder and it can be a positive integer less than divisor.

Assignment:

STEP 1:

- Write **a void** function `int_division`, which generates problems for practicing the operation integer division. After the function generates a problem, prompts the user to enter an answer. If the entered answer is correct, the function displays: "You are correct!" If the answer is not correct, the function displays "You are not correct, the correct answer is …". The user can practice multiple exercises. At the end, the function displays the number of exercises and the number of correct answers.
- Write **a void** function `remainder`, which generates problems for practicing the operation remainder. After the function generates a problem, prompts the user to enter an answer. If the entered answer is correct, the function displays: "You are correct!" If the answer is not correct, the function displays "You are not correct, the correct answer is …". The user can practice multiple exercises. At the end, the function displays the number of exercises and the number of correct answers.

Both functions should use for the dividend values a random integer between -50 and 50 and for the divisor value a random integer between 1 and 10.

STEP 2:

Write a program which offers two options for practicing: to practice integer division or to practice remainder operation. These options are offered in **a menu** and the user makes his/her choice.

Based on the user's choice, call functions created in the step 1.

The example of a possible output:

```
This program provides exercises for practicing
integer division or  finding a remainder.

If you would like to practice integer division enter 1.
If you would like to practice remainders enter 2.

Enter your choice: 2

This program tests your skills to find the remainder.
4 % 6 =
Enter your answer: 4
You are correct!
Do you want other exercise? (yes/no) yes
15 % 10 =
Enter your answer: 5
You are correct!
Do you want other exercise? (yes/no) yes
-45 % 9 =
Enter your answer: 0
You are correct!
Do you want other exercise? (yes/no) yes
49 % 1 =
Enter your answer: 1
You are not correct, the correct answer is  0
Do you want other exercise? (yes/no) no
You made  4  exercises.
Your answer was correct  3  times.
>>>
```