✓ *Upload your .py file on Google Classroom using Homework 10 assignment link.*
✓ *I should be able to run your complete code without errors.*
✓ *If you get help from anyone, please, make sure that you actually understand the solution.*

Task 1

Explore the following code. Run it several times. What does it do?

```
import random
number = random.randint(1, 100)
print(number)
```

Task 2

Let's create a game in which the user must guess a number between 0 and 100 randomly chosen by the computer (as in Task 1). Ask the user to input a number. If the number is lower, the computer says "Your number is lower"; if the number is higher, the computer says "Your number is higher". The computer keeps asking until the user makes a correct guess. (Hints: (1) Use while loop, (2) Don't forget that the input function creates a string, while you need an integer to be able to make a comparison).

Task 3

If you have not done this yet in Task 2, implement proper error handling making sure that the user actually inputs a number. Test your code to verify that entering the number in words does not crash your program.

Task 4

Add a counter to count how many attempts it took the user to guess the correct number.

Task 5

Create a list with **three** elements: (1) the first element is the name of the user (make sure to ask the user for their name first!), (2) the second element is the list that stores **all** guesses that the user needed to find the correct number, and (3) the total number of attempts it took. The list should look something like this:

Mylist = ["Oleg", [50, 75, 88, 80], 4]

(The computer's number was 80 and it took me 4 attempts to guess it; my guesses were 50, 75, 88, and 80. That was pretty lucky!)