Python Exercise 2

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1 Instructions

Finish the following exercises on a piece of paper and scan a PDF file by 20:59 PM CST, Jan 13. The exercise takes no more than **20** minutes in total. Record the time it takes to finish, and write it down at the end of your answers.

2 Class Recap

In today's lesson, we went over naming rules, operators and precedence, `math` and `random` module, type conversion and type compatibility.

3 Exercise

3.1 Naming Rules

1. Write down what naming cases the following variable/function/Package name use: `loadVPN`, `upload_address`, `FlashLoad`.

2. What cases do we use to name variables in Python?

3.2 Operators and Precedence

1. What does `+` mean when it's between two integers? What does it mean when between one integer and one float? Between two strings? Between one string and one integer?

2. What are the differences among `/`, `//`, `%`?

3. What will `4 * 4` returns? And what about `4.0 * 4`? What are the differences?

3.3 Modules

1. What do we write to introduce an external module in Python?

2. What functions that belong to the math module can you recall?

3. What does `import random; random.random()` return?

4. Play around with Python in VS Code, and write down one line of code that returns one random float between 10 and 11 (exclusive).

5. Play around with Python in VS Code, and write down one line of code that returns one random float between 10 and 15.

6. What is the range of integer in which number is returned from `random.randint(a, b)`

3.4 Type Conversion and Compatibility

1. What is the function that converts a string to an integer?

2. Try using `bool()` on `"True"`, `"Ok"`, `1`, `99`, and `0`. Search in Google why these outputs are returned (You may want to search documentation for `bool()` to start).