

Python Level 2 Review

In case you haven't been coding on your own in Python during the last few months here is a few easy exercises to get you back into the swing of things:



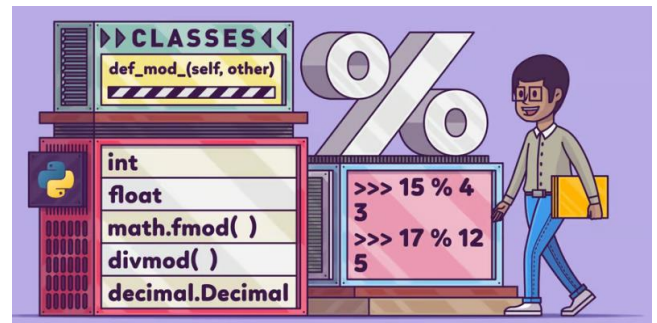
Exercise#1

Write a program that asks the user for the length and width of a rectangle and then will calculate the area of that rectangle.

Exercise#2

Write a program which will find all the numbers between 1000 and 2200 which are divisible by 7 but are **not** divisible by 2 or 9. Please print each number to the screen.

Hint: use the `range()` function and modulo (%) operator. Look it up if you have to. Google python modulo.



Exercise#3

Create a program that does the following:

Given a word entered by the user, determine if the length of the word is odd or even and report your findings to the user:

Example:

Input:

Give me a word: pizza

Output:

This word has an odd number of letters!

Exercise#4

Create a **list** of 7 colors. Using the **list**, make the Python turtle draw 7 squares filled in with each color. You must use a **for loop** to draw each of your squares. You need a second for loop it iterate through the list.

Exercise#5

Use a **while** loop to print out the following series of numbers:

2,4,6,8,10,12,14,16,18,20 # each number may appear on a separate line

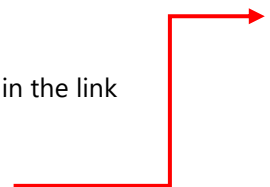
Exercise#6

Write a program to accept a **string** from the user and display characters that are present at an even index number.

For example, `str = "walzlisthebest"` so you should display 'w', 'l', 'l', 's', 'h', 'b', 's'.

Exercise#7

Use the following link: <https://www.techwithtim.net/tutorials/python-module-walk-throughs/turtle-module/key-presses-events> to create a program that allows the user to draw continuous red lines using the arrow keys (with python turtle). In Replit you must create a python (with Turtle) project to make this work. Make sure you modify the code in the link so that the turtle only moves 10 pixels (not 100) when you press the arrow keys.



Exercise#8

The goal is to implement a simple calculator which takes **strings** of simple arithmetic problems from the user (*exactly* like the ones shown below) and then outputs the answer:

Examples:

one.plus.two	Should return 3
five.minus.six	Should return -1
seven.times.two	Should return 14
nine.divided_by.three	Should return 3

Your calculator only needs to work with the numbers 0 to 10. Your program shouldn't terminate until the user types "done".

IMPORTANT NOTE:

Make sure you have completed ALL assignments in **LEVEL 1** before you move on.

If you haven't finished all the Level 1 Assignments go back and complete them and include them with this assignment (you will get marks for this).

Remember, there is no rush. You need to learn and review the basics before you'll be ready to move ahead.