

Day 1 - Coding in python

Python is powerful... and fast; and open; and ... many other things.



Job 1.0

Write a program that iterates integers from 1 to 100. For multiples of three, display "**Fizz**" instead of the number and for multiples of five display "**Buzz**". For numbers that are multiples of three and five, display "**FizzBuzz**".

Job 1.1

Write a program that displays in the terminal a rectangle with '-' and '|' depending on the input parameters, (width, height), for example:

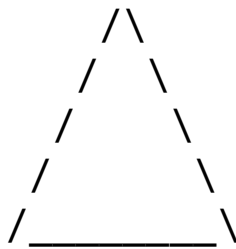
draw_rectangle(10, 3)

```
|-----|  
|-----|  
|-----|
```

Job 1.2

Write a program that displays in the terminal a triangle with '_', '\ ' and '/' depending on the input parameters, (height), for example:

draw_triangle(5)



A little algo...

Job 1.3

Luke Skywalker, a math teacher, takes a test and decides to grade his students on a scale from 0 to 100 inclusive.

If a student scores less than 40 out of 100, they fail the test.

If he is over 40, he passes the test. Luke is a very nice teacher and therefore decides to round up the grades of students who have passed the test. But Luke isn't too nice. This upward rounding will only benefit students who meet certain criteria because, all the same, we must not exaggerate, no kidding.

The criterion is simple: If a student had a grade of less than strictly 3 points of his next multiple of 5, then his grade is rounded to this multiple of 5. For example, an 83 will be rounded to 85 while an 82 will remain an 82.

To simplify Luke's work, write a function that takes a note list as a parameter and returns a list of notes, rounded as it should be, when necessary.

... For a little headache...

Job 1.4

Create a program that will ask the user to enter one word and only one, without spaces or any character other than the 26 letters of the alphabet (without accent or capital letters).

Your program will have to modify this word, changing the place of some characters (or all) in order to give a word "further" in alphabetical order than the word entered by the user.

Attention: The new word must be the closest possible word, in alphabetical order, to the original word!

For example, "abcde" would give "abced". "acedb" is also "valid" but is NOT the closest to the original word in alphabetical order.

Rendering

Create a directory on github named "runtrack-python". Create in this directory a folder "**day01**", share it with **deeptoughtlaplateforme** and for each step, a folder "**jobXX**" where XX is the number of the step.

Competencies targeted

- Install a python development environment
 - Master the basics of python
 - Implement an algorithm
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Knowledge Base

- [Python.org](https://python.org)
Official python website, documentation and download.
- [Python](#) [tutorial](#)
The basics of python development