

BDA2324

Lesson 2: Python Warmup Exercises

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Instructions

1. Create a new Colab Notebook named 'BDA2324 Practice'.
2. The notebook should contain the Python code required to solve the following exercises. Make sure to use a different cell for each solution.
3. Once you have completed the exercises, share your notebook with me at the following email address:
`umberto.ferraro@uniroma1.it`.

Exercise 1

Given an input string in the format 'hh:mm:ss', your task is to display on screen the corresponding number of seconds.

Example:

Input: '00:02:3'

Output: Result is 123

Exercise 2

Given an input string reporting a number of seconds, your task is to display on screen the corresponding timestamp in the format 'hh:mm:ss'.

Example:

Input: '123'

Output: Result is '00:02:03'

Exercise 3

Write a Python script to compare two string variables, `s1` and `s2`. The script will count and display on screen the number of positions at which the corresponding characters in these two strings are the same.

Example:

Input: `S1 = house`, `S2 = home`

Output: Result is 2

Exercise 4

The following instructions generate a random number in the interval (1,10). Use it to write a Python script where the user is asked to guess the generated number. The user will be prompted to provide her guess in a loop until the right value is guessed or a certain condition is met (e.g., exiting the game with a guess of 0).

```
import random
```

```
generated_number = random.randint(1, 10)
```

Example:

```
Guess the number: 3
```

```
Wrong
```

```
Guess the number: 2
```

```
Wrong
```

```
Guess the number: 7
```

```
Correct
```