

Practical

Please complete all the problems in one Jupyter Notebook called **Practical1.ipynb**, specifying the problem number at the top of each problem. Upload the notebook to your github repository.

Problem 1 (Github)

- 1) Create a Github account
- 2) Create an **Intro to Python** repository in your account
- 3) Clone the repository in your computer
- 4) Add a **week1** folder to the repository, the folder should contain **test.txt** file with the following content: "some text". Update your Github repository to contain these files and use "First Update" as a commit text for your commit.

Problem 2

Create the script **problem2.py**, create variables **text**, **start_index** and **end_index** and assign those 3 inputs given by the user (using the `input()` function). Print the substring of the string **text** between the indexes **start_index** and **end_index** in the following format:

The given text: Thisisasampletext.

Start index: 3

End index: 11

Output string: sisasamp

Problem 3

Create the script **problem3.py**, create a variable **str1** of type String and assign it the value "How are you John?". Then create a variable **name** of type String and assign it your name as a value.

Create a new variable **str2** of type String and do some String manipulations to give it a value "How are you **name**?", using the value of the variable **name**. Create the variable **str2** in 2 different ways:

- 1) Using a substring of the string **str1** and connecting it to the variable **name**
- 2) Replacing the value John in **str1** with the value of the variable **name** using the appropriate function

Problem 4.

Create the script **problem4.py**, create a variable **text** and assign it an input given by the user (using the `input()` function). The value inputted by the user should be 7 or more characters long and should have an odd number of characters. Print the middle 3 characters of the **text**, as well as create and print the new version of the string **text**, where the middle 3 characters are uppercase, in the following format:

The old string: abcdefghijk
Middle 3 characters: efg
The new string: abcdEFGhijk

Problem 5

Create the script **problem5.py**,

- 1) Import **datetime**, **time** and **calendar** modules
- 2) Print on separate lines:
 - a) Current date and time (example: 2014-09-26 16:34:40.278298)
 - b) The value of the current year (example: 2014)
 - c) The value of the current month (example: 9)
 - d) The value of the current day of the week (example: 4 or 5 i.e. Friday)
- 3) Subtract 5 days from the current date and time and print the result (example:
2014-09-21 16:34:40.278298)
- 4) Add 5 days from the current date and time and print the result (example:
2014-10-01 16:34:40.278298)