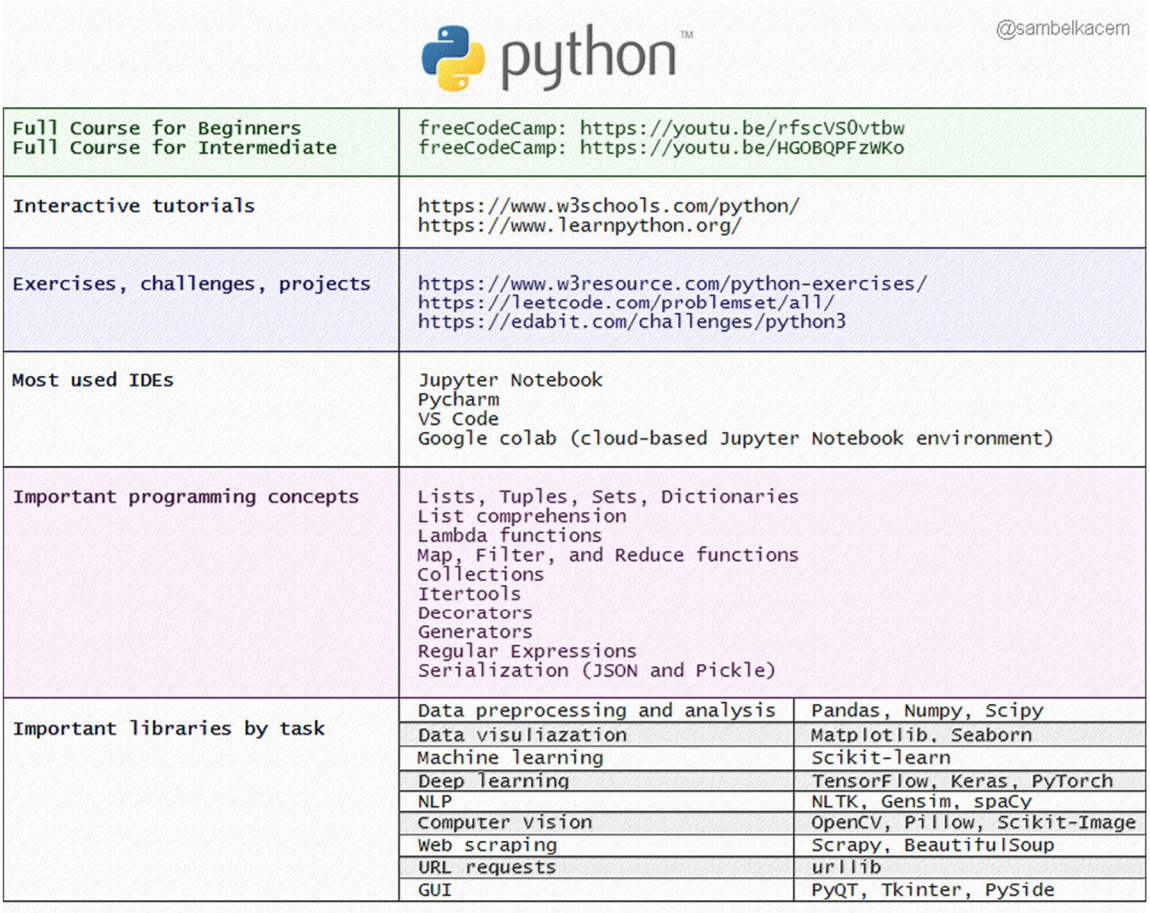
Python is supposed to be a pre-requirement in the workshops and hackathon of AI'Fest23.

Since first-year students have not studied Python yet, I have gathered in this post the most interesting resources that can help you get acquainted with it before the event.

1- This picture summarizes the most important things to know about Python in the field of AI and Data science (programming concepts, most popular libraries for each task, resources to practice, etc.)



2- I have gathered in this GitHub repository the most popular cheat sheets and reference cards for Python (main programming concepts, main data types, main libraries, etc.)

- https://github.com/SamBelkacem/AI-ML-cheatsheets/tree/main/03-%20Python

3- I have previously used this amazing Jupyter notebook from Stanford University to make a workshop at ENSIA entitled "Introduction to Programming with Python". The notebook explains all the details, step by step, including programming code that you can directly execute.

- https://cs231n.github.io/python-numpy-tutorial/

4- There are some dedicated resources that guide you and explain how to switch from C++ to Python. The purpose is to quickly understand the similarities and differences without restudying everything from scratch like beginners. Second-year students have used these resources in the module "Introduction to AI", where they had to switch from C++ to Python.

- https://intro2ml.pages.doc.ic.ac.uk/autumn2021/modules/lab-cpp/introduction
- https://python.pages.doc.ic.ac.uk/cpp/lessons/cpp/

P.S. All these resources can also be useful in the next few years as you will mainly be using Python