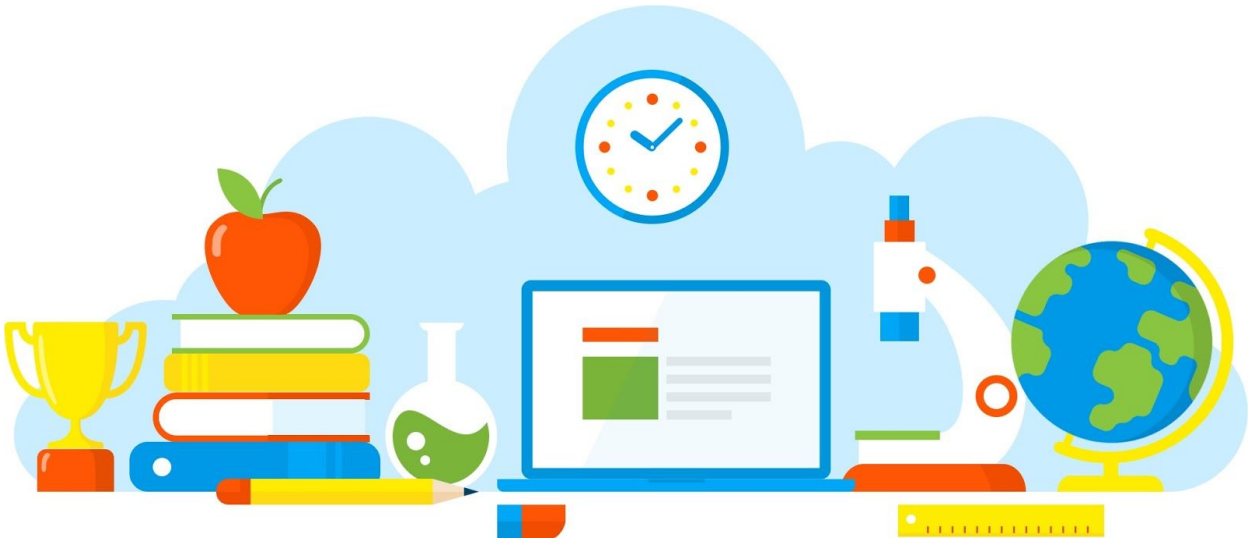

Let's Go Python!

GBUS-401
Python Lab 1: Fundamentals

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Introduction

Python has been more and more popular in recent years. Compared with other popular programming languages like C++ or Java, "Python's design philosophy emphasizes code **readability** with its notable use of significant **whitespace**."[Wiki] Except for Data Science/AI, Python can also provide a wide range of possibilities. It is chosen as one of the primary programming languages in companies like Instagram, Google, Spotify, Uber, Netflix, Dropbox, etc.

The First Step: Installation

Anaconda is recommended for Python installation, you can download it via this link by choosing your OS. You can understand Anaconda as a management tool for embedding Python environments, by using Anaconda, you can keep the environments easier to set up and cleaner to use. After installation, open your command prompt, there should be "(base)" in front of your user name. Should be like this:

Manage your environments

With your Anaconda, you can easily manage your Python environments. The word between brackets is the current environment name, so we are in the default "base" environment. So the next step is to create your own environment by using:

```
conda create --name [ENV_NAME]
```

PS: there are TWO dashes and there are more arguments for customization, like "`conda create --name [ENV_NAME] python=[PYTHON_VERSION]`". Check more commands through this.

After creating your environment, you need to activate it every time before you use it:

```
conda activate [ENV_NAME]
```

However, say what if I forgot it? Try "`conda env list`", then you will know all the existing environments on your machine. If you want to delete some environments, try

this: "`conda env remove --name [ENV_NAME]`". No worry if you cannot remember all of these commands now, you can always check all kinds of commands on this website.

Install your packages

Python supports all kinds of packages and you can easily download them by using commands "`pip install [PAC_NAME]`" or "`conda install [PAC_NAME]`". The pip one is a built-in command in Python and conda is a built-in command in Anaconda, feel free to use either one.

Let's try this: "`conda install -c conda-forge jupyterlab`" and after downloading, try this"`jupyter notebook`".