# SETTING UP THE PYTHON ENVIRONMENT

## ➔ Install Anaconda distribution

- Download and install anaconda from here
  - https://docs.anaconda.com/anaconda/install/index.html
- Verify your anaconda installation
  - https://docs.anaconda.com/anaconda/install/verify-install/

## ➔ Open Jupyter notebook

- Open notebook from Anaconda navigator - https://docs.anaconda.com/ae-notebooks/4.3.1/user-guide/basic-tasks/apps/jupyter/
- Open notebook from shell/terminal - https://jupyter-notebook-beginner-guide.readthedocs.io/en/latest/execute.html
- Additional resources to get familiar with notebook
  - https://www.codecademy.com/articles/how-to-use-jupyter-notebooks
  - https://medium.com/codingthesmartway-com-blog/getting-started-with-jupyter-notebook-for-python-4e7082bd5d46

## ➔ Import your first library in notebook

- First type **`import this`** in a notebook cell and run it to see the Zen of Python
- Play around with the **`datetime`** library using the cheatsheet
  - https://github.com/Panchamy/TIL6010/tree/main/Additional%20Materials

## ➔ Markdown in notebook

Use markdown within jupyter notebook to create notes.

https://guides.github.com/features/mastering-markdown/

https://www.markdownguide.org/basic-syntax/

## ➔ Installing libraries

- Install library from conda - `conda install *library_name*`
- Install libraries from .txt file - `conda install --file *path_to_requirements.txt*`
- Create and install library within an environment
  - https://conda.io/projects/conda/en/latest/user-guide/tasks/manage-environments.html

# CODE MANAGEMENT ENVIRONMENT

## ➔ Create a personal Github account

Create a free Github account here - https://github.com/join

## ➔ Follow the course GitHub repository

Click on 'Watch' in the course GitHub repository for updated course materials here - https://github.com/Panchamy/TIL6010

## ➔ Install Git (for those who want to use terminal/command prompt) or GitHub desktop

- Download and install git - https://git-scm.com/downloads

OR

- Download and install GitHub desktop - https://desktop.github.com

## ➔ Create your own personal repository remotely for the course assignments

- Go to https://github.com
- Create a new private repository titled 'TIL6010-Assignments'
- You can also make it private by going to settings.
- Invite the following users to the repository as collaborators - 'Panchamy', 'nguyenthientin'

## ➔ Clone your personal assignment repository locally

- Using the GitHub desktop - https://docs.github.com/en/desktop/contributing-and-collaborating-using-github-desktop/adding-and-cloning-repositories/cloning-and-forking-repositories-from-github-desktop
- Using command line
    - Create a personal access token - https://docs.github.com/en/github/authenticating-to-github/keeping-your-account-and-data-secure/creating-a-personal-access-token
    - Use the token to clone the repository

## ➔ First commit in your personal repository

- Using the GitHub Desktop - https://docs.github.com/en/desktop/contributing-and-collaborating-using-github-desktop/making-changes-in-a-branch/committing-and-reviewing-changes-to-your-project
- Using the command line - https://docs.github.com/en/github/managing-files-in-a-repository/managing-files-using-the-command-line/adding-a-file-to-a-repository-using-the-command-line

## ➔ How to follow the course content in GitHub?

- Watch the course GitHub here 'https://github.com/Panchamy/TIL6010' and download/check each time there is any changes or updates

OR

- Clone this repository - https://github.com/Panchamy/TIL6010
- Pull regularly from this repository for the updates
- Be careful when you make changes in this folder locally, there will be merge conflicts when you pull.

## ➔ Error handling within the course

In case of errors or questions, first GOOGLE, second STACKOVERFLOW, third the ISSUES page in the course repository https://github.com/Panchamy/TIL6010/issues and finally the INSTRUCTORS.

How to use the issue page in course repository?

- Use the error name as title and label (feel free to create more labels when necessary). Examples of error names are KeyErrror, NameError, CondaHTTPError, etc.
- Use appropriate labels for each issue
- Help each other out with the errors