Python Programing – Class Agenda (24.01.66)

- Installing python program (python v.3.10) and setup path environment
- Create environment for project
    - install virtual environment manager ***pip install virtualenv***
    - check python list: ***py --list***
    - create virtual environment ***py -3.10 -m virtualenv {your-project-name}***
    - starting virtual environment
        - Windows PowerShell (VSCode default terminal):
        name_project\Scripts\activate.psl
        - Windows Command Prompt: ***project-name\Scripts\activate***
        - Mac Terminal: ***source project-name/bin/activate***
        - To close the virtual environment: ***deactivate***
    - ***pip install notebook*** or ***pip install jupyterlab***
    - Add virtual environment to the Jupyter kernel list
        - Install ipykernel: ***pip install ipykernel***
        - Add the virtual environment with your preferred name to identify the
        virtual environment: ***py -m ipykernel install –{name your-kernel-name}***
        - Check jupyter kenelspec: ***jupyter kernelspec list***
        - Remove jupyter kernel spec environment: ***jupyter kernelspec uninstall
        {your -kernel-name}***
    - Install packages.
        - ***pip install pandas***
        - ***pip install matplotlib***
        - ***pip install -U scikit-learn***
        - ***pip install tensorflow***
        - ***pip install numpy***
        - ***pip install opencv-python***
    - If your want to install all package above, use this command line to get
    requirement.txt file: ***python -m pip install requirement.txt***

- Basic syntax (** No Package **)
    - Data Type: Numerical / Float / Double / String / List / Dictionary / Tuple / Boolean /
    - For Loop/ While Loop
    - Function
    - Class
    - Read/Write file
    - module

Machine Learning – Class Agenda (25.01.66)

- Overview of Machine learning (Slide)
- Training model step by step (Image classification) Traditional Machine Learning method
  - Import data from oracle cloud service
  - Data Exploratory
  - Data Preprocessing
  - Data Transform
  - Train model

- Training model step by step (Image classification) Deep learning method
  - Import data from oracle cloud service
  - Data Exploratory
  - Data Preprocessing
  - Data Transform
  - Train model