**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 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 package
    - ***pip install pandas***
    - ***pip install matplotlib***
    - ***pip install -U scikit-learn***
    - ***pip install tensorflow***
    - ***pip install numpy***
    - ***pip install opencv-python***
* 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