 <b>Marwadi University</b> Marwadi Chandarana Group	NAAC <b>A+</b>	<b>Marwadi University</b> <b>Faculty of Technology</b> <b>Department of Information and Communication Technology</b>	
<b>Subject: Probability and Statistics (01CT1401)</b>	<b>Aim: How to Process , Analyze and Visualize Data</b>		
<b>Task - 2</b>	<b>Date:- 10-02-2024</b>	<b>Enrollment No:- 92200133030</b>	

## Day – 0 :- Setup and Installations

### Steps and Procedure:

- 1) Install Python From <https://www.python.org/downloads/>
- 2) Check Python Version.

```
Microsoft Windows [Version 10.0.19045.3996]
(c) Microsoft Corporation. All rights reserved.

D:\Aryan Data\Usefull Data\Semester - 4\Probability and Statistics\TASK -2 - Statistics -Case study - simulation -Data exploration - visualization, descriptive analysis, Hypothesis testing, regression> python --version
Python 3.12.1
```

It Should be Python\_\_ 3.2.x or newer, For Python 3.

- 3) Then Install Setup tools.

```
D:\Aryan Data\Usefull Data\Semester - 4\Probability and Statistics\TASK -2 - Statistics -Case study - simulation -Data exploration - visualization, descriptive analysis, Hypothesis testing, regression>pip install setuptools
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Requirement already satisfied: setuptools in c:\users\online\appdata\roaming\python\python312\site-packages (69.0.3)
```

- 4) Now Create New Python Environment.

```
(base) C:\Users\online\pip-24.0>conda create --name ARYAN
Collecting package metadata (current_repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 23.7.4
  latest version: 24.1.0

Please update conda by running

    $ conda update -n base -c defaults conda

Or to minimize the number of packages updated during conda update use


    conda install conda=24.1.0

## Package Plan ##

  environment location: C:\Users\online\.conda\envs\ARYAN

Proceed ([y]/n)? y

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
```

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- 5) Then Activate that Enviroment. Install pip-24.0.tar.gz from <https://pypi.org/project/pip/#files> and navigate to the directory where setup.py is there and install using given commands.

```
(ARYAN) C:\Users\online\pip-24.0>git clone https://github.com/dataiap/dataiap.git dataiap
Cloning into 'dataiap'...
remote: Enumerating objects: 1342, done.
remote: Total 1342 (delta 0), reused 0 (delta 0), pack-reused 1342Receiving objects: 96% (1289/1342), 78.96 MiB | 3.37 Receiving objects: 100% (1342/1342), 79.13 MiB | 3.3
1 MiB/s, done.
Resolving deltas: 100% (730/730), done.

(ARYAN) C:\Users\online\pip-24.0>git dataiap
git: 'dataiap' is not a git command. See 'git --help'.

(ARYAN) C:\Users\online\pip-24.0>git pull
fatal: not a git repository (or any of the parent directories): .git

(ARYAN) C:\Users\online\pip-24.0>cd dataiap

(ARYAN) C:\Users\online\pip-24.0\dataiap>git pull
Already up to date.
```

- 6) Then Clone a Git Repository and pull all the Updates

```
(base) C:\Users\online\pip-24.0>conda activate ARYAN

(ARYAN) C:\Users\online\pip-24.0>python setup.py install
running install
C:\Users\online\AppData\Roaming\Python\Python312\site-packages\setuptools\_distutils\cmd.py:66: SetuptoolsDeprecationWarning: setup.py install is deprecated.
!!

    Please avoid running ``setup.py`` directly.
    Instead, use pypa/build, pypa/installer or other
    standards-based tools.

    See https://blog.ganssle.io/articles/2021/10/setup-py-deprecated.html for details.
    *****

!!
self.initialize_options()
C:\Users\online\AppData\Roaming\Python\Python312\site-packages\setuptools\_distutils\cmd.py:66: EasyInstallDeprecationWarning: easy_install command is deprecated.
!!

    Please avoid running ``setup.py`` and ``easy_install``.
    Instead, use pypa/build, pypa/installer or other
    standards-based tools.

    See https://github.com/pypa/setuptools/issues/917 for details.
    *****

!!
self.initialize_options()
error: can't create or remove files in install directory



The following error occurred while trying to add or remove files in the
installation directory:

[Errno 13] Permission denied: 'C:\Program Files\Python312\Lib\site-packages\test-easy-install-4588.write-test'

The installation directory you specified (via --install-dir, --prefix, or
the distutils default setting) was:
```

#### Note :-

Don't Use Link “git clone git://github.com/dataiap/dataiap.git dataiap”  
Instead Use Link “git clone https://github.com/dataiap/dataiap.git dataiap”

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## 7) Now Install Numpy.

```
(ARYAN) C:\Users\online\pip-24.0\dataiap> pip install numpy
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Requirement already satisfied: numpy in c:\users\online\appdata\roaming\python\python312\site-packages (1.26.4)
```

## 8) Now Install Scipy.

```
(ARYAN) C:\Users\online\pip-24.0\dataiap> pip install scipy
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Requirement already satisfied: scipy in c:\users\online\appdata\roaming\python\python312\site-packages (1.12.0)
Requirement already satisfied: numpy<1.29.0,>=1.22.4 in c:\users\online\appdata\roaming\python\python312\site-packages (from scipy) (1.26.4)
```

## 9) Now Install Matplotlib.


```
(ARYAN) C:\Users\online\pip-24.0\dataiap> pip install matplotlib
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Requirement already satisfied: matplotlib in c:\users\online\appdata\roaming\python\python312\site-packages (3.8.2)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (1.2.0)
Requirement already satisfied: cycler>=0.10 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (4.48.1)
Requirement already satisfied: kiwisolver>=1.3.1 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (1.4.5)
Requirement already satisfied: numpy<2,>=1.21 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (1.26.4)
Requirement already satisfied: packaging>=20.0 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (23.2)
Requirement already satisfied: pillow>=8 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (10.2.0)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (3.1.1)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\online\appdata\roaming\python\python312\site-packages (from matplotlib) (2.8.2)
Requirement already satisfied: six>=1.5 in c:\users\online\appdata\roaming\python\python312\site-packages (from python-dateutil>=2.7->matplotlib) (1.16.0)
```

## 10) Now Install dateutil

```
(ARYAN) C:\Users\online\pip-24.0\dataiap>pip install python-dateutil
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Requirement already satisfied: python-dateutil in c:\users\online\appdata\roaming\python\python312\site-packages (2.8.2)
Requirement already satisfied: six>=1.5 in c:\users\online\appdata\roaming\python\python312\site-packages (from python-dateutil) (1.16.0)
```

## 11) Now Install pyparsing.

```
(ARYAN) C:\Users\online\pip-24.0\dataiap>pip install pyparsing
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Requirement already satisfied: pyparsing in c:\users\online\appdata\roaming\python\python312\site-packages (3.1.1)
```

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12) Now Install mrjob.

```
(ARYAN) C:\Users\online\pip-24.0\dataiap> pip install mrjob
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Collecting mrjob
  Downloading mrjob-0.7.4-py2.py3-none-any.whl (439 kB)
    ----- 439.6/439.6 kB 624.1 kB/s eta 0:00:00
Collecting PyYAML>=3.10 (from mrjob)
  Downloading PyYAML-6.0.1-cp312-cp312-win_amd64.whl.metadata (2.1 kB)
  Downloading PyYAML-6.0.1-cp312-cp312-win_amd64.whl (138 kB)
    ----- 138.7/138.7 kB 910.9 kB/s eta 0:00:00
Installing collected packages: PyYAML, mrjob
  WARNING: The scripts mrjob-3.7.exe, mrjob-3.exe and mrjob.exe are installed in 'C:\Users\online\AppData\Roaming\Python\Python312\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed PyYAML-6.0.1 mrjob-0.7.4
```

13) Now Install boto.

```
(ARYAN) C:\Users\online\pip-24.0\dataiap> pip install boto
Defaulting to user installation because normal site-packages is not writeable
DEPRECATION: Loading egg at c:\users\online\appdata\roaming\python\python312\site-packages\pip-24.0-py3.12.egg is deprecated. pip 24.3 will enforce this behaviour change. A possible replacement is to use pip for package installation.. Discussion can be found at https://github.com/pypa/pip/issues/12330
Collecting boto
  Downloading boto-2.49.0-py2.py3-none-any.whl (1.4 MB)
    ----- 1.4/1.4 MB 1.4 MB/s eta 0:00:00
Installing collected packages: boto
Successfully installed boto-2.49.0
```

14) Now Download The Dataset

<https://ocw.mit.edu/ans7870/RES/RES.6-009/iap12/datasets/P00000001-ALL.zip>

and unzip it at dataiap/datasets/pres\_cam

**Congratulations!! You are done with all the necessary setup .**