Day 7 Assignment: Amaan Shaikh

Jupyter Setup and File Handling

Step 1: Download Anaconda

1. **Visit the Anaconda Website**:

   o Go to anaconda.com in your web browser.

2. **Download the Installer**:

   o Click on the "Download" button.

   o Choose the version suitable for your operating system (Windows, macOS, or Linux).

   o Select the Python 3.x version (not 2.x, as it's outdated).

3. **Save the Installer**:

   o Save the installer file to your preferred download location.

Step 2: Install Anaconda

1. **Run the Installer**:

   o Double-click the downloaded installer file.

2. **Follow Installation Prompts**:

   o Click "Next" on the initial setup screen.

   o Accept the license agreement.

   o Choose "Just Me" unless you want to install for all users.

   o Select the installation path or leave it as default.

   o **(Important)** Check the option "Add Anaconda to my PATH environment variable." If not available, check "Register Anaconda as my default Python 3.x."

3. **Complete Installation**:

   o Click "Install" to begin the installation process.

   o Wait for the installation to complete.

   o Click "Finish" when the installation is done.

Step 3: Launch Anaconda Navigator

1. **Open Anaconda Navigator**:

   o After installation, search for "Anaconda Navigator" in your start menu or applications folder and open it.

2. **Initial Setup**:

   o The first launch might take a little time as Anaconda configures itself.

   o You'll see a dashboard with various options like Jupyter Notebook, Spyder, etc.

Step 4: Launch Jupyter Notebooks

1. **Launch Jupyter Notebook**:

   o From the Anaconda Navigator, click on the "Launch" button under the Jupyter Notebook option.

   o This will open a web browser window with the Jupyter Notebook interface.

2. **Create a New Notebook**:

   o In the Jupyter interface, navigate to the directory where you want to create your notebook.

   o Click on "New" and select "Python 3" to create a new notebook.

3. **Start Coding**:

   o You can now start writing Python code in the cells.

   o Run code cells using the "Run" button or by pressing Shift + Enter.

File Handling:

Python provides a robust way to handle files, allowing you to create, read, update, and delete files. File handling is an essential part of programming, especially when working with data stored in files. Python's built-in functions and methods make file manipulation simple and intuitive.

Opening and Closing Files

Files can be opened using the open() function, which requires a filename and a mode indicating the purpose of opening the file:

- 'r': Read mode (default). Opens the file for reading.

- 'w': Write mode. Opens the file for writing (overwrites existing content).

- 'a': Append mode. Opens the file for writing, appending new content to the end.

File   Edit   View   Run   Kernel   Settings   Help

Trusted

Code   ▾ Open in...   ⚙   Python 3 (ipykernel) ◯

[58]:
```python
import os

file = open('C:\\Users\\Admin\\Documents\\Hexaware Submissions\\Testfile.txt', 'r')
content = file.read()
print(content)
file.close()
```

FC Barcelona, commonly known as BarÃ§a, is one of the most prestigious and successful football clubs in the world. Founded on November 29, 1899, by a gro up of Catalan, Spanish, German, and Swiss football enthusiasts led by Joan Gamper, the club has a rich history and a global following.

Key Highlights:

Achievements: Barcelona has won numerous domestic and international titles, including multiple La Liga titles and Copa del Rey trophies. They have also c laimed the UEFA Champions League title several times, showcasing their dominance in European football.

Stadium: The team's home ground is Camp Nou, one of the largest stadiums in Europe with a seating capacity of over 99,000. It is known for its electrifyi ng atmosphere and is a symbol of the club's grandeur.

Iconic Players: The club has been home to many legendary players, including Lionel Messi, who is considered one of the greatest footballers of all time. Other notable figures include Johan Cruyff, Xavi Hernandez, and AndrÃ©s Iniesta.

Playing Style: Barcelona is renowned for its attacking style of play, often referred to as "tiki-taka," which involves short, quick passes and maintainin g possession. This style has been popularized and refined by various coaches, including Johan Cruyff and Pep Guardiola.

Rivalries: The club has a fierce rivalry with Real Madrid, known as El ClÃ¡sico. This fixture is one of the most anticipated and high-profile matches in the football calendar, representing not just a football contest but also a clash of cultures and histories.

The clubâ€™s motto, "MÃ©s que un club" (More than a club), reflects its role as a symbol of Catalan identity and its influence beyond just football.

[59]:
```python
file_path = 'C:\\Users\\Admin\\Documents\\Hexaware Submissions\\Testfile.txt'

with open(file_path, 'r') as file:
    line = file.readline()
    print(line)  # First Line of the file


with open(file_path, 'r') as file:
    lines = file.readlines()
    print(lines)   #List containing all Lines
```

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```python
file = open(file_path, 'a')
file.write('\nNew players include Marc Casado, Pau Prim, Vitor Roque, Lamine Yamal')
file.close()
```

[60]:
```python
#Writing one line to file
writefile = 'C:\\Users\\Admin\\Documents\\Hexaware Submissions\\Writefile.txt'
with open(writefile, 'w') as filew:
    filew.write('\n Hansi Flick is now their new coach for season 2024-25.\n')
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```

```python
[61]:  new_players = ['Marc Bernal\n', 'Dani Olmo\n', 'Pau Victor\n']
       with open(writefile, 'w') as filew:
           filew.writelines(new_players)
```

```python
[62]:  with open(writefile, 'r') as file:
           lines = file.readlines()
           print(lines)   #List containing all lines
```

       ['Marc Bernal\n', 'Dani Olmo\n', 'Pau Victor\n']