Experiment no. : 1

Aim : Study of Anaconda Ide and its Installation

Name : Vaibhav Laxman Karale

Roll no: 58

Sec : 3A

Subject : ET 1

Date: 10/10/2024

Anaconda IDE Overview

Anaconda is a popular distribution of Python and R programming languages specifically designed for data science, machine learning, and artificial intelligence workflows. It simplifies package management and deployment, making it easier to work with large-scale data analysis, scientific computing, and deep learning tasks.

Key Features:

1. **Pre-installed Libraries**: Anaconda comes with over 1,500 scientific packages like NumPy, Pandas, Matplotlib, Scikit-learn, TensorFlow, and more.

2. **Conda Package Manager**: This tool allows you to manage packages and environments easily, ensuring that you can maintain reproducibility across projects.

3. **Jupyter Notebooks**: Integrated for interactive code development and visualizing data science workflows.

4. **Spyder IDE**: A lightweight Integrated Development Environment (IDE) that comes pre-installed, designed for Python programming.

5. **Virtual Environments**: Easily create isolated environments to manage different versions of libraries and dependencies for various projects.

Installation of Anaconda

Follow these steps to install Anaconda:

1. **Download Anaconda:**

   o   Go to the Anaconda official website.

   o   Download the installer that matches your operating system (Windows, macOS, or Linux).

2. **Run the Installer:**

   o   **Windows:** Double-click the downloaded .exe file and follow the prompts.

   o   **macOS/Linux:** Open a terminal and navigate to the downloaded file. Use the command to start the installer:

3. **Follow the Installation Wizard:**

- o   Accept the license agreement.

- o   Select installation options (e.g., whether to add Anaconda to the system PATH).

- o   Wait for the installation to complete.

4. **Verify Installation:**

   - o   After installation, open a terminal or command prompt and type:

This command will display the installed version of Anaconda, confirming that it was successfully installed.

5. **Launch Anaconda Navigator:**

   - o   Open **Anaconda Navigator** from your applications or the command line.

   - o   Use Navigator to launch applications like Jupyter Notebooks, Spyder IDE, or manage environments and packages.