

---

# 🐍 Getting Started with Anaconda Python: Installation and Environment Setup

---

## 🔗 Step 1: Download and Install Anaconda Python

1. Go to the official Anaconda website:
    - [Download Anaconda](#)
  2. Download the installer suitable for your system (Windows, macOS, Linux). For most users:
    - Choose **64-Bit Graphical Installer** for Windows.
  3. Run the installer:
    - Choose “Just Me” during setup.
    - Allow the installer to add Anaconda to your system **PATH** (optional, but recommended for this setup).
    - Complete the installation.
- 

## 🔍 Step 2: Locate Anaconda Scripts Folder

1. Open **File Explorer**.
2. Go to `*C:*`
3. Click on the **View** tab at the top → Enable ☒ **Hidden items**.
4. You will now see the `ProgramData` folder.
5. Navigate to:
6. `C:\ProgramData\Anaconda3\Scripts`

*(Folder name could be `Anaconda3` or `Anaconda4` depending on version)*

7. Press `F4` in the address bar (Explorer shortcut) → It highlights the full path.
  8. Press `Ctrl + A` → `Ctrl + C` to copy the path.
- 

## ⚙️ Step 3: Add Anaconda Scripts to Environment Variables

1. Click **Start Menu** → Search for "**Environment Variables**".
  2. Click **Edit the system environment variables**.
  3. In the new window, click **Environment Variables**.
  4. Under **System Variables**, find and select **Path**, then click **Edit**.
  5. Click **New** → Paste the copied path:
  6. `C:\ProgramData\Anaconda3\Scripts`
  7. Click **OK** → Then again **OK** to apply changes.
-

## 🔧 Step 4: Open Anaconda Prompt and Initialize Conda

1. Click **Start Menu** → Search for **Anaconda Prompt** → Open it.
  2. Run the following command to initialize Conda:
  3. `conda init`
- 

## 🔧 Step 5: Create and Manage Conda Environments

### □ Option 1: Create a Blank Environment First, Then Install Python

```
conda create --name env_name_01
conda activate env_name_01
conda install python
```

### 📦 Option 2: Create Environment with Python Included

```
conda create --name env_name_01 python
conda activate env_name_01
```

---

### 📦 Installing Packages (Once the Environment is Activated)

```
pip install numpy
pip install pandas
pip install matplotlib
pip install scikit-learn
```

📖 **Reference:** Browse packages on [PyPI - Python Package Index](https://pypi.org/)

---

## 🔄 Activating and Deactivating Conda Environments

### ▶ **conda activate**

Used to **enter** a specific environment.

```
conda activate env_name_01
```

★ Example:

```
(env_name_01) C:\Users\yourname>
```

Your prompt changes, showing the current active environment in parentheses.

---

### □ **conda deactivate**

Used to **exit** the current active environment and return to base (or system default).

```
conda deactivate
```

★ Example:

```
(base) C:\Users\yourname>
```

---

## 📖 Useful References

- 🗨 Anaconda Documentation: [docs.anaconda.com](https://docs.anaconda.com)
  - 🗨 Conda Commands Cheat Sheet: [Conda Cheat Sheet \(PDF\)](#)
  - 🗨 PyPI Library Index: <https://pypi.org>
- 

## ✓ Summary

Task	Command
Create env without Python	<code>conda create --name env_name_01</code>
Create env with Python	<code>conda create --name env_name_01 python</code>
Activate env	<code>conda activate env_name_01</code>
Deactivate env	<code>conda deactivate</code>
Install package	<code>pip install package_name</code>

---