Executing Python from the Command Line

Executing Python from the command line is a common task for running scripts or interactive Python sessions. Here are step-by-step instructions for different operating systems:

For Windows:

1. **Open the Command Prompt or PowerShell:**
   - Press `Win + R`, type `cmd` or `powershell`, and press Enter.

2. **Navigate to the Python File's Directory (if necessary):**
   - Use the `cd` command to navigate to the directory where your Python file is located:
   ```bash
   cd path\to\your\python\file
   ```

3. **Run the Python Script:**
   - Execute the Python script by typing:
   ```bash
   python script.py
   ```

   Replace `script.py` with the name of your Python file.

4. **Alternatively (if using Python 3):**
   - If you have both Python 2 and Python 3 installed, you might need to use `python3` instead:
   ```bash
   python3 script.py
   ```

For macOS and Linux:

1. **Open the Terminal:**
   - Open the terminal.

2. **Navigate to the Python File's Directory (if necessary):**
   - Use the `cd` command to navigate to the directory where your Python file is located:
   ```bash
   cd path/to/your/python/file
   ```

3. **Run the Python Script:**
   - Execute the Python script by typing:
   ```bash
   python script.py
   ```

   Replace `script.py` with the name of your Python file.

4. **Alternatively (if using Python 3):**

- If you have both Python 2 and Python 3 installed, you might need to use `python3` instead:
  ```bash
  python3 script.py
  ```

Using Python Interpreter Interactively:

1. **Open the Terminal or Command Prompt:**
   - Open the terminal or command prompt.

2. **Type the Python Interpreter:**
   - For an interactive Python session, simply type:
     ```bash
     python
     ```
     or
     ```bash
     python3
     ```

3. **You'll see the Python Prompt (`>>>`):**
   - This means you are now in interactive mode.
   - You can enter Python code directly and see the results instantly.

4. **Exit the Interactive Mode:**
   - To exit the interactive mode, type:
     ```bash
     exit()
     ```

These steps assume that you have Python installed and added to your system's PATH variable. If you encounter issues, ensure that Python is installed correctly and that the PATH variable includes the directory where the Python executable is located.