Various Environments which can be used for Python Programming

1. IDLE (Integrated development environment)

When you install Python, IDLE is also installed by default. This makes it easy to get started in Python. Its major features include the Python shell window (interactive interpreter), auto-completion, syntax highlighting, smart indentation, and a basic integrated debugger.
IDLE is a decent IDE for learning as it's lightweight and simple to use.
However, it's not for optimum for larger projects.

2. Sublime Text 3

Sublime Text is a popular code editor that supports many languages including Python. It's fast, highly customizable and has a huge community. It has basic built-in support for Python when you install it. However, you can install packages such as debugging, auto-completion, code linting, etc. There are also various packages for scientific development, Django, Flask and so on. Basically, you can customize Sublime text to create a full-fledged Python development environment as per your need.
You can download and use Evaluate Sublime text for an indefinite period of time. However, you will occasionally get a pop-up stating "you need to purchase a license for continued use".

3. Atom

Atom is an open-source code editor developed by Github that can be used for Python development (similar Sublime text).
Its features are also similar to Sublime Text. Atoms are highly customizable. You can install packages as per your need. Some of the commonly used packages in Atom for Python development are autocomplete-python, linter-flake8, python-debugger, etc.

4. Jupyter Notebook

The Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, data visualization, machine learning, and much more.

Various Environments which can be used for Python Programming

1. PyCharm

PyCharm is an IDE for professional developers. It is created by JetBrains, a company known for creating great software development tools. There are two versions of PyCharm:

Community - free open-source version, lightweight, good for Python and scientific development
Professional - paid version, full-featured IDE with support for Web development as well
PyCharm provides all major features that a good IDE should provide: code completion, code inspections, error-highlighting and fixes, debugging, version control system and code refactoring. All these features come out of the box.

2. Visual Studio Code

Visual Studio Code (VS Code) is a free and open-source IDE created by Microsoft that can be used for Python development.
You can add extensions to create a Python development environment as per your need in VS code. It provides features such as intelligent code completion, linting for potential errors, debugging, unit testing and so on.
VS Code is lightweight and packed with powerful features. This is the reason why it is becoming popular among Python developers.

3. Spyder

Spyder is an open-source IDE usually used for scientific development. The easiest way to get up and running up with Spyder is by installing Anaconda distribution. If you don't know, Anaconda is a popular distribution for data

science and machine learning. The Anaconda distribution includes hundreds of packages including NumPy, Pandas, scikit-learn, matplotlib and so on. Spyder has some great features such as autocompletion, debugging and iPython shell. However, it lacks features compared to PyCharm.