Aim: Learning various environments which can be used for Python Programming.

For writing python code, there are various Python IDEs and code editors are available. A code editor is a tool used to write and edit code. An IDE (Integrated Development Environment) understand the code much better than a text editor.
Following are some of the code editors and IDEs used for Python programming:

1. IDLE:

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 optimum for larger projects.

2. 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.

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. Spyder has some great features such as autocompletion, debugging and IPython shell. However, it lacks in features compared to PyCharm.

4. 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. Atom is 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.

5. PyCharm:

PyCharm is an IDE for professional developers. It is created by JetBrains, a company known for creating great software development tools. 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.
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.

6. 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.

7. Vim:

Vim is a text editor pre-installed in Linux and macOS systems. We need to download it for windows. It has its own keyboard shortcuts and commands. It's also extendible. We can add plugins for syntax highlighting, code completion, debugging, refactoring, etc. to Vim and use it as Python IDE.

8. 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 becoming popular among Python developers.