Basic Programming in ‘Python’ {

[How to start working on Python]

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}

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[Python IDEs and Code Editors]

}

Introduction; {

‘How to choose a Python IDE/code editor that serves your purpose?’

{I want a Python IDE/code editor for:

1. Learning
2. Development

}

What Is the Best IDE for Python?

The best Python IDE is that which enhances your coding experience and productivity by the greatest margin.

}

1. Online Compiler from Programiz

{

< If you want to start writing Python code without investing time in installing Python and setting up a development environment, you can use an online Python compiler.

You just need the internet and a browser to get started.
https://www.programiz.com/python-programming/online-compiler/ >

}

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.Anaconda - Jupyter Notebooks? {

< An open-source distribution of Python that is mainly used for data science and machine learning. >

}

Why is it useful? {

< Includes a package manager called Conda, which allows users to install and update dependencies for Python. >

}

02 {

[Installing Anaconda and Visual Studio Code Editors on Windows]

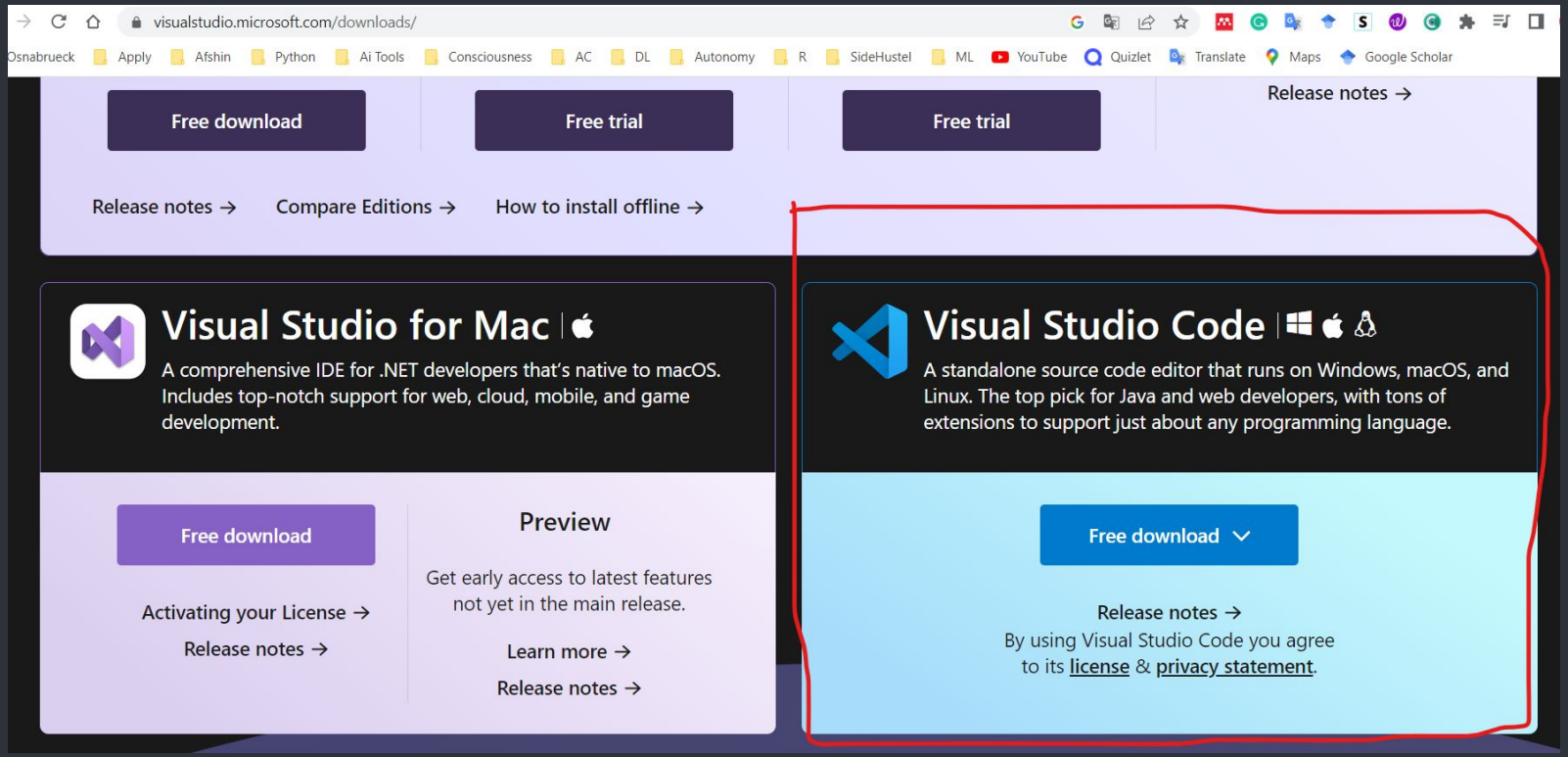
You will learn about various Python IDEs and code editors for beginners and professionals.

}

Installing ‘Visual Studio Code’ {

- **Step 01** Download Visual Studio Code
  https://visualstudio.microsoft.com/downloads/
- **Step 02** Install the Visual Studio Installer once it is downloaded, run the installer VSCodeUserSetup-{version}.exe). This will only take a minute.
- **Step 03** By default, VS Code is installed under C:\Users\{Username}\AppData\Local\Programs\Microsoft VS Code
- **Step 04** Python extension for Visual Studio Code
  https://marketplace.visualstudio.com/items?itemName=ms-python.python

}


visualstudio.microsoft.com/downloads/
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Apply
Afshin
Python
Ai Tools
Consciousness
AC
DL
Autonomy
R
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Release notes →
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How to install offline →
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A comprehensive IDE for .NET developers that's native to macOS. Includes top-notch support for web, cloud, mobile, and game development.
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Release notes →
Visual Studio Code
A standalone source code editor that runs on Windows, macOS, and Linux. The top pick for Java and web developers, with tons of extensions to support just about any programming language.
Free download
Release notes →
By using Visual Studio Code you agree to its license & privacy statement.

Here are the steps to get started with VS Code for Python programming:

- Install VS Code
- Install the Python extension: Open VS Code and navigate to the extensions tab on the left-hand side of the screen. Search for the "Python" extension and install it.
- Create a new Python file: Click on the Explorer icon on the left-hand side of the screen and create a new folder for your project. Right-click on the folder and select "New File". Name the file with a ".py" extension (e.g. "hello.py").

- Write your Python code: Open the file you just created and start writing your Python code.

- Run your Python code: To run your code, open the terminal in VS Code by clicking on the Terminal tab at the top of the screen. Type "python" followed by the name of your file (e.g. "python hello.py") and press enter. You should see the output of your code in the terminal.

- Debugging: VS Code has a powerful built-in debugger for Python. To use it, set breakpoints in your code by clicking on the line number in the editor, and then start debugging by clicking on the Debug tab at the top of the screen. Follow the instructions in the debugger to step through your code and find bugs.

- Install Python packages: To install Python packages, open the terminal and type "pip install" followed by the name of the package you want to install (e.g. "pip install numpy"). Press enter to execute the command. Pip will automatically download and install the package, along with any dependencies it requires. Once the installation is complete, you can import the package into your Python code and start using it.

Example

Download a package named "camelcase":

```
C:\Users\Your Name\AppData\Local\Programs\Python\Python36-32\Scripts>pip install camelcase
```

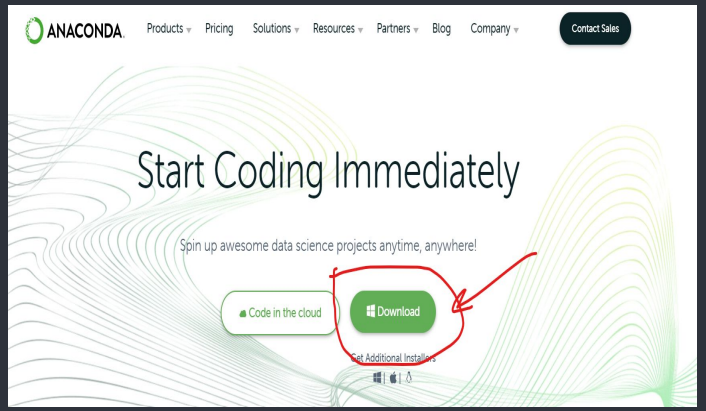
Installing ‘Anaconda’ {

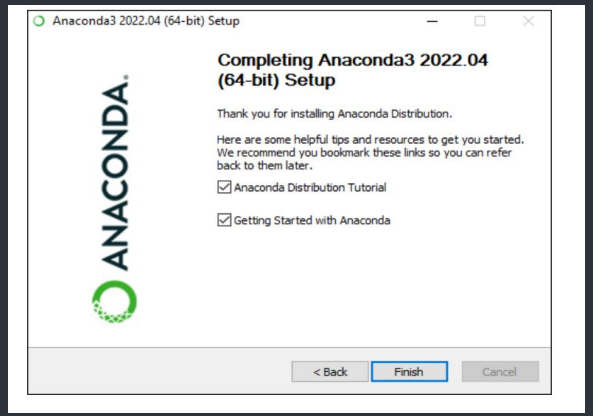
Step 01

Download the Anaconda installer.
https://www.anaconda.com/

Step 02

Once it is downloaded, run the installer. This will only take a minute.





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03 {

[Installing Anaconda and Visual Studio Code on MacOS]

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What is Anaconda?

Installing Anaconda on MacOS {

< 1. Go to the official Anaconda website https://www.anaconda.com/products/distribution >

< 2. Click on the MacOS icon under the download button, which will direct you to Anaconda installers. >

< 3. Based on the chip you have (M1/M2), download the respective installer. >

< 4. In case you have problems in installing Anaconda, you may want to have a look at the official Anaconda documentation https://docs.anaconda.com/anaconda/install/mac-os/ >

```
(base) melisaaltinyelek@Melisas-Air ~ % conda --version
conda 4.12.0
(base) melisaaltinyelek@Melisas-Air ~ %
```

check the version of conda on your local machine

}

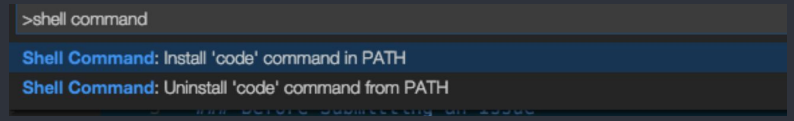
list all packages installed

```
(base) melisaaltinyelek@Melisas-Air ~ % conda list
```

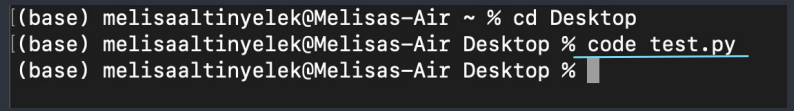
What is Anaconda?

Installing VS Code on MacOS {

< 1. Please visit the website https://code.visualstudio.com/download to download VS Code. >
< 2. In order to run VS Code from the terminal, press **Shift + Cmd + P** to open the **Command Palette.** >
< 3. Then type “**shell command**” and select “**Install ‘code’ command in PATH**”



< 4. Now you should be able to execute VS Code in any folder via the terminal by typing ‘code’. You can also create scripts: https://vscode-docs.readthedocs.io/en/latest/editor/setup/ >



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Keyboard shortcuts for MacOS: https://code.visualstudio.com/shortcuts/keyboard-shortcuts-macos.pdf

Alternative ‘Resources’ {

1. Top 15 Python IDEs and Code Editors to Use in 2023: https://www.knowledgehut.com/blog/programming/best-python-ides-code-editors-guide

2. Why Jupyter? https://odsc.medium.com/why-you-should-be-using-jupyter-notebooks-ea2e568c59f2

3. Python Development in Visual Studio Code https://realpython.com/python-development-visual-studio-code/#:~:text=One%20of%20the%20coolest%20code,great%20platform%20for%20Python%20development

}

```
Thanks; {

    ‘Do you have any questions?’

}
```