

# How to Enable Python Virtual Environment

A guide to creating isolated environments for Python projects

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# What is a Virtual Environment?

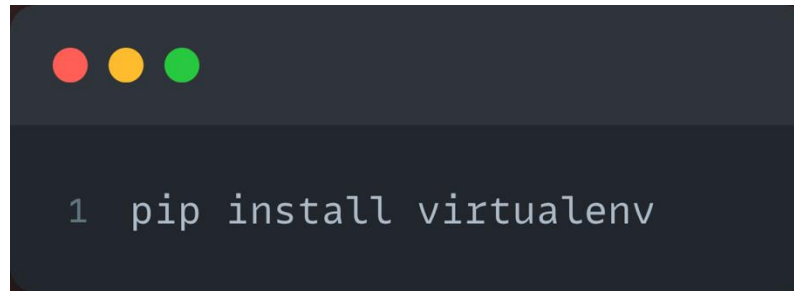
- A virtual environment is a self-contained directory that contains a Python installation for a project.
- Allows you to manage dependencies separately from the global Python environment.
- Ensures that project dependencies do not interfere with other projects.

# Benefits of Using a Virtual Environment

- Isolates project-specific packages and dependencies.
- Avoids conflicts between different package versions.
- Makes it easy to share code with others (via [requirements.txt](#)).

# Step 1 – Installing **virtualenv**

- Open your terminal.
- Run the command:

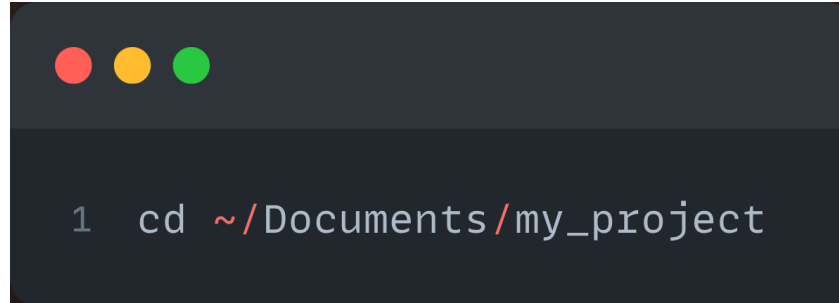
A dark-themed terminal window with three colored window control buttons (red, yellow, green) in the top-left corner. The terminal displays a single line of text: `1 pip install virtualenv`.

```
1 pip install virtualenv
```

- This installs the tool that lets you create virtual environments.

## Step 2 - Create a **virtualenv**

- Navigate to your project folder

A terminal window with a dark background and three colored window control buttons (red, yellow, green) in the top-left corner. The command `1 cd ~/Documents/my_project` is entered in a light gray font.

```
1 cd ~/Documents/my_project
```

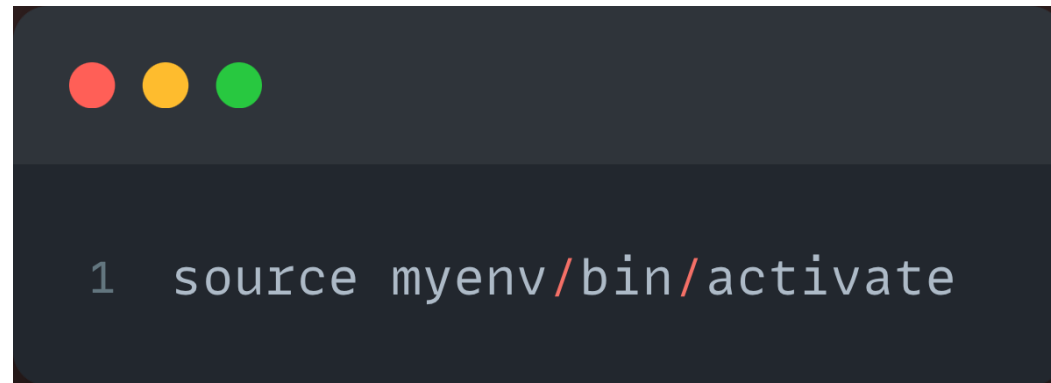
- Create the environment

A terminal window with a dark background and three colored window control buttons (red, yellow, green) in the top-left corner. The command `1 python3 -m venv myenv` is entered in a light gray font.

```
1 python3 -m venv myenv
```

## Step 3 – Activate the **virtualenv**

- On Mac/Linux, use this command

A dark-themed terminal window with three colored window control buttons (red, yellow, green) in the top-left corner. The terminal displays a single line of code: `1 source myenv/bin/activate`.

```
1 source myenv/bin/activate
```

- After activation, you'll see (myenv) at the start of your terminal prompt, indicating the virtual environment is active.

# Step 4 – Install Packages

- Once the virtual environment is activated, install packages as needed. For example:



```
1 pip install pandas
```

A dark-themed terminal window with three colored window control buttons (red, yellow, green) in the top-left corner. The text "1 pip install pandas" is displayed in a light gray monospace font.

## Step 5 - Deactivate the **virtualenv**

- When you're done working, deactivate the environment by running

A dark-themed terminal window with three colored window control buttons (red, yellow, green) in the top-left corner. The text '1 deactivate' is displayed in a light gray monospace font.

```
1 deactivate
```



## Step 6 – Re-Activating Later

- Whenever you need to work on the project again, just reactivate it using

A terminal window with a dark background and three colored window control buttons (red, yellow, green) in the top-left corner. The command '1 source myenv/bin/activate' is displayed in a light gray font.

```
1 source myenv/bin/activate
```

**Thank You!**