Day 13 - Pip and Venv

Well done on getting to day 13! Only 1 more days left on this introduction journey! Today we are going to learn about Virtual Environments as well as the Python Package Installer.

Python has the great feature of being able to install other people's code / packages into your own project! Let's look at what that looks like.

First, let's look at "import" in Python.

```
tello.py  ×                                          main.py  ×
Day 13 >  tello.py >  drone                          Day 13 >  main.py
1    def drone():                                    1    import tello
2        print("Pretend I am drone!")                2    print("this is main.py")
                                                      3
                                                      4    tello.drone()
```

In the above example, tello.py creates a function called "drone". In the main.py you "import tello" which imports the contents of tello.py, which is the "drone function". You can now use tello.drone() in main.py to call the drone function. This means you can have several people work on several features in different .py files all at the same time. Amazing!!

To install something that is not just another .py file in your project folder, you need to install the package using python's built in pip3 command.

```
TERMINAL    OUTPUT    DEBUG CONSOLE    PROBLEMS

~/Desktop/14 Days Of Py
pip3 install droneblocks-python-utils
```

To install the amazing DroneBlocks Package all you need to do is type the following in the terminal window:
pip3 install droneblocks-python-utils

Python allows us to make a virtual environment that creates a folder in your project and saves any pip3 installed packages there.

```
~/Desktop/14 Days Of Py
python3 -m venv my-venv

~/Desktop/14 Days Of Py
source my-venv/bin/activate
```

python3 -m venv <name>
This creates the environment named <name>

source <name>/bin/activate
This will activate the virtual environment.
And now you're ready for today's challenge!