Here’s a summary of the steps to install Python, PyCharm Community Edition and setup the IDE to run Swarm Simulator code:

**Installing Python:**

Download python 3.6.x, where x is any of the versions available and follow the prompts

Install the following python packages:

pip install numpy

pip install pandas

pip install PyOpenGL

pip install Pillow

pip install PyQt5

pip install opencv-python

pip install pyglet==1.5.27

pip install Gnuplot

**Installing PyCharm Community Edition:**

1. Download PyCharm Community Edition from the official JetBrains website.
2. Once the download is complete, locate the downloaded file (usually in your “Downloads” folder) and double-click on it to initiate the installation process.
3. [For macOS users, download the disk image and drag the PyCharm icon into the Applications folder when prompted](https://www.dataquest.io/blog/how-to-set-up-pycharm-community-edition/).
4. For Windows users, download the .exe installer. [Run the installer and follow the guidelines provided by the setup wizard](https://www.dataquest.io/blog/how-to-set-up-pycharm-community-edition/).
5. [For Linux users, you can use the terminal and write the following command: sudo snap install pycharm-community --classic](https://learnpython.com/blog/install-pycharm-python-ide-windows-ubuntu/).
6. [After completing the installation, you’ll be able to access PyCharm either via the Windows Start menu, Applications directory, Launchpad, Spotlight, or by utilizing the desktop shortcut if you chose to create one](https://www.dataquest.io/blog/how-to-set-up-pycharm-community-edition/).

**Cloning from GitHub:**

**Running Swarm Simulator:**

For Windows/Linux/MacOs:

- run pycharm

- open swarm-world as a project

- Open File->Settings-"Project-Interpreter"

- Chose python3.6 as an interpreter

- chose Run->swarm-sim.py

    - If it gives an error that it cannot find the interpreter

       Open Run->"Edit Configuration" Chose the python3.6 as an interpreter