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# How to use the terminal to make it appear to non-developer bystanders like you're in the matrix

https://github.com/FloorD/terminalmatrix

# You don't need to install anything, as every computer has such a terminal.

or Command Prompt. or Shell.

# Python is already in your terminal. Dafuq? How did that happen?

Linux and Mac operating systems come with Python already installed

You can run Python from the terminal simply by typing python (this is called the 'interactive mode')

Next, typing 1 + 1, our terminal will return the answer (being 2, obviously)

Hit the + and everyone passing by will think you're an evil hacker!

Another example of python's interactive mode, just to get the flow of things? Type (line by line!):

```
the_world_is_flat = 1
if the_world_is_flat:
    print("Be careful not to fall off!")

# don't forget to indent the last sentence with 4
spaces, it's a python thing...
```

See that #-thing? That means that what follows is a comment.

Use Ctrl-D to exit the interactive python 'shell'.

## Hello, PyLadies!

Standard practice when learning a new language is writing a little Hello, World! program. We need a texteditor for this!

#### **Open your text editor and write:**

print("Hello, World!")

Sublime is a free solution and industry standard.

Save the file, and name it "hello.py". Open the terminal and navigate to the directory where you created your first program.

#### **Directory-WHAT?**

mkdir PyLadies cd PyLadies mkdir Images mkdir Files

Typing in open . will open the whole directory for you.

### Moving back to your hello.py file, make sure it's saved in your Files folder and switch to your Files folder using the terminal:

cd Files

Now, type:

python hello.py

Your terminal will (if all went well) return the following:

Hello, World!

### Turtle Shell

#### We'll be moving a (imaginary) turtle on a screen. To start type:

```
python
import turtle
turtle.forward(15)
```

Repeat that last command (turtle.forward(15)) a few times and you'll see our turtle moving 15 pixels in the direction it is facing, drawing a line as it moves.

Up for a roadtrip?

```
turtle.right(25)
# rotates in-place 25 degrees clockwise
turtle.backward(10)
turtle.color("green")
# makes the arrow green
turtle.pencolor("green")
                                find more commands here:
# makes the line green
                                docs.python.org/2/library/turtle.html
turtle.showturtle()
# or: turtle.st(), to make sure the turtle is visible
turtle.shape("turtle")
# to give the turtle it's turtle-shape (alternative-
ly: turtle.shape("circle"))
turtle.shapesize(5, 5, 12)
# makes it a rather big turtle
turtle.reset()
# to erase all lines and start over
```

### Thanks!

