















Aim: How can we run python programs directly from the shell?

2. Tell the file where to find python.

Earlier, we ran a python program from the shell with a command like this: \$ python hello.py

When we do this, the file didn't need execute permissions because you were running it through python, which is executable.

If a python file is executable, it still needs to know where to find python, since python is required to interpret our source code. We will have to put this information *in our python file*.

First, we need to know the actual location of python. This is what the which command does. On moe, we should see this:

```
dw@moe:~$ which python
/usr/bin/python
```

This means that the full path to python is /usr/bin/python. In order to put this directly into our program, we have to add the following as THE FIRST LINE OF OUR PROGRAM:

#!/usr/bin/python

Fun fact: this is sometimes called the sh-bang line, which is short for hash-bang, fun names for the # and ! symbols, respectively.

