CamJam EduKit Worksheet One

Project Printing to the screen using Python

Description Run your first python program to print “Hello World” to the screen. You will not be connecting any of the contents of the EduKit to the Raspberry Pi for this short exercise.

Equipment Required

□ Raspberry Pi & SD Card □ Monitor & HDMI Cable □ Keyboard & Mouse □ Power supply

Setting up your Raspberry Pi

Find your Raspberry Pi.

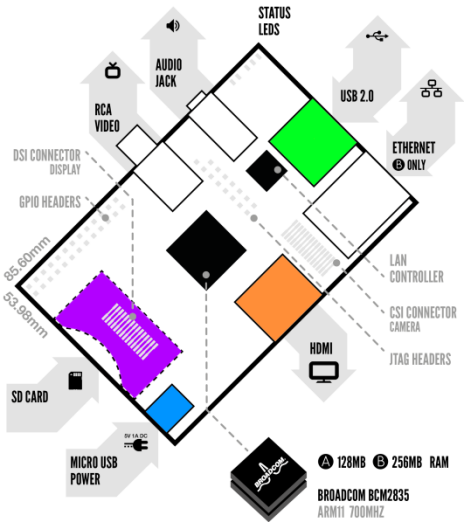
Plug in the SD card (or Micro SD on the B+).

Plug in the HDMI cable into the Pi and the monitor.

Plug in the keyboard into the USB ports.

Plug in the mouse into the USB ports.

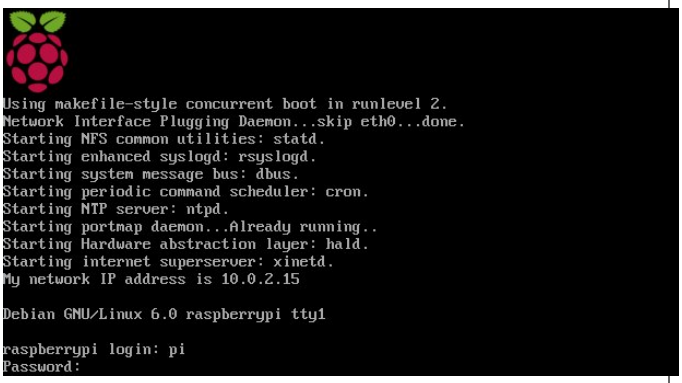
Plug in the power cable.



When all wired up it should look like this. The B+ will look slightly different.

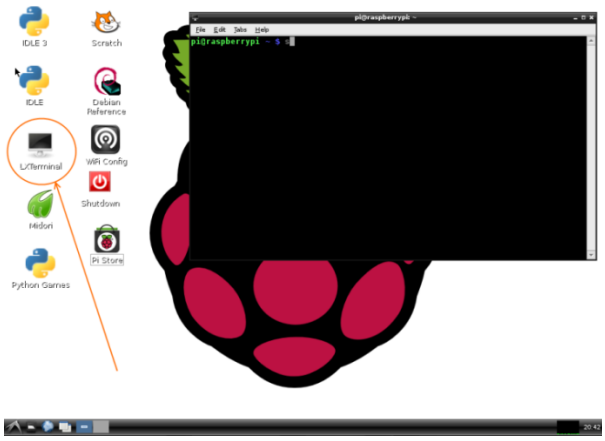
Setting up your Raspberry Pi

After the Raspberry Pi has finished booting, you will see either the Graphical User Interface (as in the image below right) or the 'terminal' (as in the image on the right). If you see the 'terminal' screen on the right:



- Type in the user name "pi"
- Type in the password "raspberry"
- Type "`startx`" to load the graphical user interface

Double click on "LXTerminal". This will load the "terminal" window where you will enter your commands.



Code

You are now going to create our first small piece of Python code that will simply print "Hello World" to the screen.

First, you are going to create a directory where the code for the EduKit worksheets will be stored. Type in the follow commands, pressing the 'return' key at the end of each line:

```
cd ~
mkdir EduKit
cd EduKit
nano 1-helloworld.py
```

Changes to your home directory.
Makes a new directory called 'EduKit'.
Changes to the 'EduKit' directory.
Opens the 'nano' editor with the name '1-helloworld.py'

You will now be in the text editor called 'nano' where you will type in your code.

Type in the following code exactly as seen.

```
#Print Hello World!

print "Hello World!"
```

A comment; everything on the same line after a '#' is a comment and will be ignored by Python.
Print "Hello World!" to the screen.

Code

To save the code in the file, type “Ctrl + x” then “y” then “enter”.

- “Ctrl + x” tells nano that you want to exit. It will ask you whether you want to save the file, to which you answer ‘y’ for ‘yes’.
- It will then prompt for the name of the file, which you set when you opened the file. Just press the “enter” key to take the default.

Running the Code

To run this code type:

```
python 1-helloworld.py
```

You will see it print “Hello World!” to the screen.