



MY FIRST PYTHON PROGRAM

Project

Taking user input and printing to the screen using python.

Description

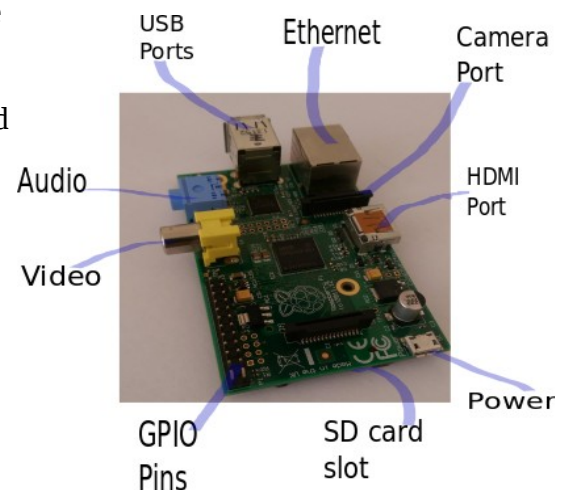
Run your first python program to take the input from the user, in this case it will be your name. Then it will print "Hello there, *your name!*"

Equipment You Will Need

- ☐ Raspberry pi & SD card
- ☐ Monitor & HDMI cable
- ☐ Keyboard & mouse
- ☐ Power supply

Setting Up The Raspberry Pi

- Plug in your SD card or Micro SD card depending on the raspberry pi you have
- Plug one end of the HDMI cable into the raspberry pi and the other end into the monitor
- Plug in the mouse to one of the USB ports
- Plug the keyboard into another USB port
- plug in the power supply into the micro USB port.



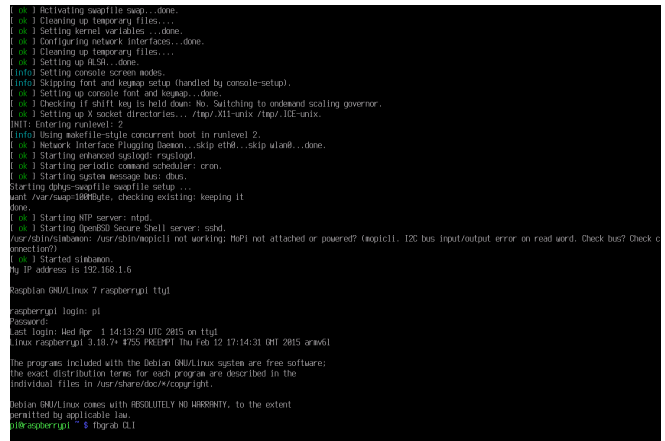
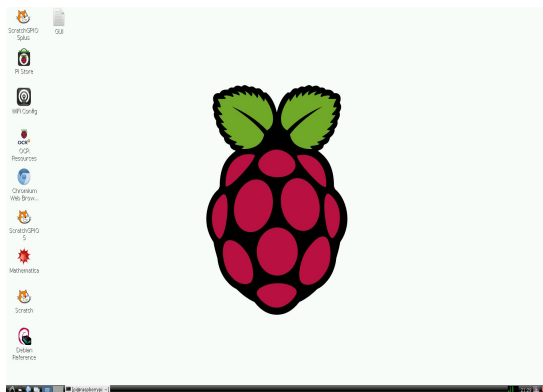
After you have connected all the wires and inserted your SD card, your pi should look a little like this.





After the raspberry pi has finished booting, you will either end up in the command line interface (CLI) as in the picture below on the right or in the graphical user interface (GUI) as the picture below on the left. If you see the CLI then you will need to:

- Type the user name “pi”
- Type the password. The default password is “raspberry”



Code

You are now going to create your first python program that will take input from you and display it on the screen.

If you are not in the CLI then you will want to open the LxTerminal application.



The first thing we are going to do is create a new directory called Python. This is where all our python code is stored. Type the following commands which are in blue pressing the “enter” key after every line:

| | |
|-------------------------------------|---|
| <code>cd ~</code> | Changes to the home directory |
| <code>mkdir Python</code> | Creates a directory (folder) called Python |
| <code>cd Python</code> | Changes to the python directory |
| <code>nano MyFirstProgram.py</code> | Opens the “nano” text editor creating the file called “MyFirstProgram.py” |

You will now be in the “nano” text editor. This is where we will type our code. Type in the code exactly as seen below, which is in red.

| | |
|--|---|
| <code># My first python program</code> | This is a comment. Everything on the same line after the “#” python will ignore |
| <code># This will print out on screen</code> | Another comment |



| | |
|--|---|
| <pre>print "Hello. I am a python program"</pre> | This will print "Hello. I am a python program" to the screen |
| <pre># This will take input from you and store it as a variable called name to use later</pre> | Yet another comment |
| <pre>name = raw_input ("What is your name? ")</pre> | This is asking you to input your name and saves it to use later under the variable "name" |
| <pre># This line will print out "Hello there, followed by your name</pre> | Another comment |
| <pre>Print "Hello there, " + name + "!"</pre> | This prints "Hello there, " on screen followed by your name, followed by "!" |

To save the file press "ctrl + x" then "y" then "enter".

- "ctrl + x" tells nano that we want to exit. Nano then asks us if we want to save the file, which we pressed "y" for yes.
- It will then ask you for a file name, but because we named it at the start we just press "enter" to take the name we have already given the file.

Running The Code

To run the program type python MyFirstProgram.py

This will then:

- display "Hello. I am a python program"
- followed by "What is your name? "
- Type your name and press enter
- The program then displays "Hello there, your name !"

That is all for this tutorial please join me again for the next one

Happy coding from the RaspiKidd

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If you have any questions please leave a comment tweet post on facebook or just email me. The email address is at the bottom of the page.