**Code conversation full solution - mu plotter**

**Code link: You can download the code for this program at https://tinyurl.com/4a4422ub**

**Describe what the whole program is doing in a couple of sentences:**

This program uses the python editor program Mu. It has to be used with Mu because it uses Mu’s plotter facility to plot values sent out from the micro:bit to your computer over USB. When you move the slider about a reading “data” is sent to the Mu plotter and you can see the values change on the Mu plotter on your computer screen.

**Fill in the blanks**

|  |  |
| --- | --- |
| ***Code*** | ***What is this line doing?*** |
| from microbit import | imports the micro:bit module to give you access to all the hardware that is built-in into your board |
| Import time | Imports the time module to enable a tiny sleep pause to be inserted before another reading is taken |
|  |  |
| while True: | forever |
| data = (pin2.read\_analog(),)\* | The data has to be sent as a Python tuple, even though it only has one value.  That's why there are extra () and a comma in the line highlighted above. |
| print(data) | Uses the print function in micropython to print the variable data (which is the reading from the slider) to the Mu plotter program. |
| time.sleep(0.05) | Puts a tiny pause (0.05 is a twentieth of a second) in between each trip round the while loop. |

\*to create a tuple with one item you are required to use the empty brackets plus a comma. Tuple is a collection which is ordered and unchangeable. Allows duplicate members.

