

## Writing Python Scripts – if Function

### Basic if Function:

If you want your script to execute a line of code only if certain criteria are met you will need an if command. To use this you must enter if and a space followed by your condition and then immediately followed by a colon. On the next line which you must indent enter the line of code which you want to be executed only if the condition is met, repeat this for any further lines of code which you wish to be included in the if statement. For example, if you wanted the variable angle to be displayed in the terminal window only if it was greater than 45, you would enter :

```
if angle > 45:  
    print angle
```

This should appear in your Python script as:

```
if angle > 45:  
    print angle
```

### if Function Relying on Keyboard Input:

If you want your script to execute a line of code only if a certain key is pressed on the keyboard (so a user can get Baxter to move only when everyone is out of the way for example) you must enter the following code:

```
s = raw_input("Press q to run ... ")  
if s == 'q':  
    print angle
```

This should appear in your Python script as:

```
s = raw_input("Press q to run ... ")  
if s == 'q':  
    print angle
```

Here "Press q to run ... " is the prompt that will be displayed in the terminal window to ask for you to enter the input and the if command is asking if the raw input q has been input. To run this in the terminal window you would press q then enter when the prompt appears in the window. You can replace **print angle** with whatever command you want to be run once the input is activated.

Note:

You will need to indent the rest of the lines of code after the if statement if you want them to be executed only if the particular key chosen is pressed.