BBC micro:bit Coding

Python Coding with the Mu app

What is Mu?

Mu is a free BBC micro:bit Python code editor designed for Windows, Mac and Linux PCs or the Raspberry Pi.

Get the Mu App

Visit the **Mu** website ...

codewith.mu

... then follow the download and install instructions for your PC or Raspberry Pi.

Using Mu

Here are the most important Mu icons:

New, **Load** and **Save** manage your Python code files.
Flash creates a '.hex' file and uploads it to the micro:bit.
Repl opens a command console and error debugging panel.

Coding With Mu

To begin coding follow these steps:

1) Connect the micro:bit to the PC with a **USB cable**
2) Start the Mu app and open a **New** code file
3) **Type** in your code (turn over for some code examples)
4) Open the **Repl** window panel (in case of any errors)
5) Click the **Flash** icon to upload and run your program

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4 Python Programs To Try

Countdown Timer

```
from microbit import *

display.show('3')
sleep(1000)
display.show('2')
sleep(1000)
display.show('1')
sleep(1000)
display.show('0')
```

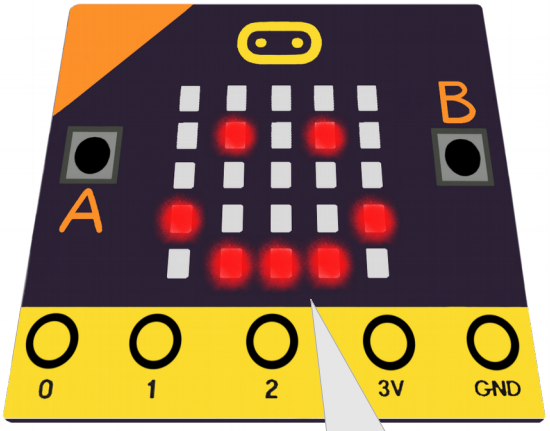
Capture Button Presses

```
from microbit import *

while True:
  if button_a.is_pressed():
    display.show(Image.HAPPY)
  if button_b.is_pressed():
    display.show(Image.SAD)
```

Visit **goo.gl/EbrszB** for more image names and lots of code examples.

Images and Animations

```
from microbit import *

# images
display.show(Image.HEART)
sleep(2000)
display.show(Image.PACMAN)
sleep(2000)
display.show(Image.SNAKE)
sleep(2000)
# animations
display.show(Image.ALL_CLOCKS)
sleep(2000)
display.show(Image.ALL_ARROWS)
```



I can run your code!

Design Your Own Images

```
from microbit import *

# define a 5x5 digit string where
# 9=max-brightness and 0=min-brightness
img = Image('99999:07770:00500:03330:11111')
display.show(img)
```

More Python Tutorials at davidbriddock.blogspot.co.uk