

day68 microbit images  
Due Wednesday 3/6/24

Don't forget, I made you a living document that is a [microbit quick reference](#). We also have our old [Python quick reference](#) if you want to look at that.

Start today by opening [the micro:bit images tutorial](#) and going through it.

After you have worked your way all the way through the tutorial, do the assignment below.

Write and load a program that does the following:

1. Put your name at the top in a comment. A comment starts with #.
2. Next add the line "from microbit import \*"
3. Create a while True: loop and put everything below into it.
4. Scroll your first name to start things off.
5. Display two of the pre-defined images for 2 seconds each.
6. Use `display.clear()` to clear the screen then use the `display.set_pixel(0,0,9)` command to set five pixels to be on. Sleep for 2 seconds, then clear the screen again. Remember, the first number in the `set_pixel` call is the column, then second is the row, and the third is how bright you want the light (9 is full bright, 1 is very dim). The columns and rows go from 0 to 4.
7. Make and then show an image that you created using the same method they show in the boat example. Show this image for 5 seconds. It can't be anything like the boat example. I want something that is recognizable that you personally have created. Start with this image of all zeros and change numbers to 9s for bright lights and lower numbers for less bright lights:

```
pict = Image("00000:"  
             "00000:"  
             "00000:"  
             "00000:"  
             "00000")
```

8. Make a Python list variable, put 5 images into it, and then animate a sequence of images (your own images, or pre-defined images, I don't care). They show you how to do this in the Tutorial. Do not use `Image.ALL_ARROWS` or `Image.ALL_CLOCKS`. I'm asking you to create a list variable containing at least 5 images and then animate it as shown in the example code. Play with the animation timing so that you are happy with the "show."
9. Turn your program in on the Google Classroom. Make sure the file you turn in is the file that contains your program for today!

I will be coming by to check you off in person, so even if you are done and have turned in your code, please leave the micro:bit connected with the Mu Editor open with your code showing until I come over to check you off. If you are stuck waiting for me, find something school-related to work on.

When you are done, feel free to play around with the microbit, exploring other tutorials, trying out the block coding environment (via the web site), or otherwise figuring out some other cool things that we can do with these. They each have two buttons, for example, plus a three axis accelerometer, not to mention Bluetooth functionality in them. There is a lot we can do with these!