

SAY HELLO



WITH

KITRONIK INVENTOR'S KIT

AND

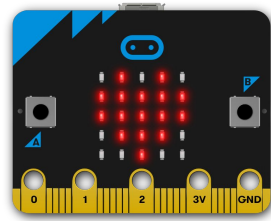


EduBlocks

Making the transition from
Scratch to Python easier



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OBJECTIVE

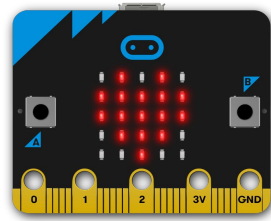
Within this tutorial, you are going to learn how to display an image on the LED matrix. You will also learn how to display text on the LED matrix and how to use external buttons as the A and B buttons on the micro:bit

WHAT YOU WILL NEED

- A micro:bit
- Kitronik Inventor's Kit
- Micro USB cable
- A Computer to Program the micro:bit
- Battery pack for micro:bit (optional)



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GETTING STARTED

1. Go to a web browser (e.g. Chrome) on your chosen computer whether it be PC Mac or Raspberry Pi.
2. Type the following web address in the search bar of your web browser or click on the link below:

<https://microbit.edublocks.org/>

CREATING THE CIRCUIT

From the inventor's kit you will need:

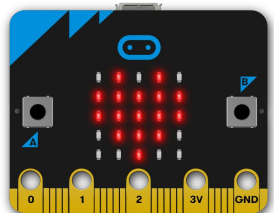
2 x push buttons

4 x male to female jumper wires

1 x base plate with the breadboard and micro:bit edge connector attached, also plug your micro:bit into the edge connector.



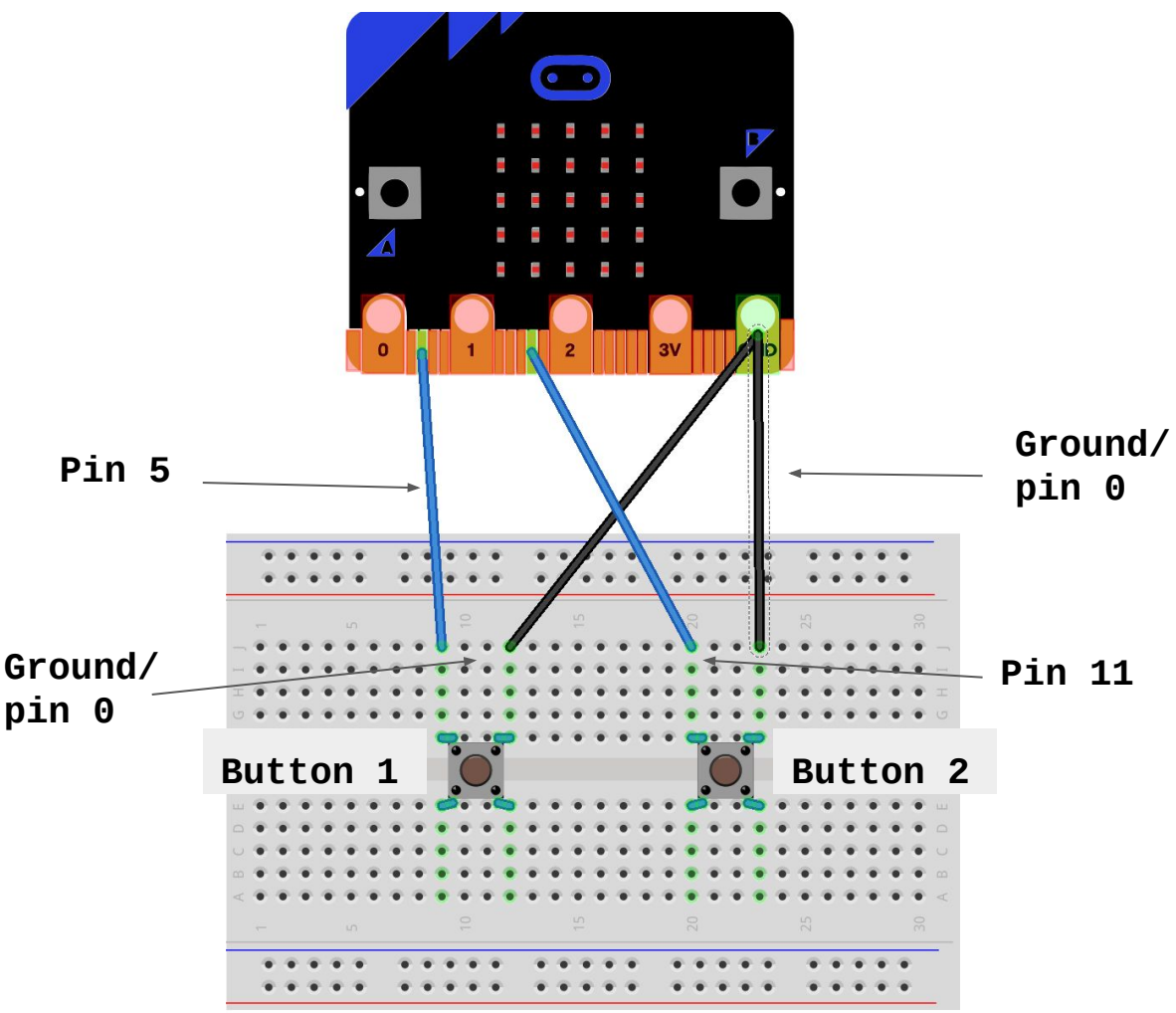
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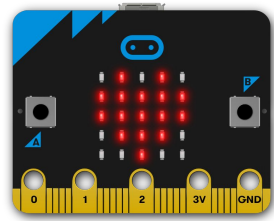
CREATING THE CIRCUIT

Your circuit should look like this but with the edge connector attached to the micro:bit.





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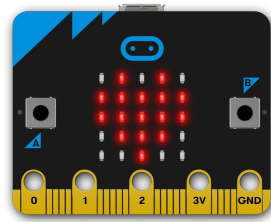
CODING

Now to create some code. The pink blocks are located in the Basics menu, The blue blocks are located in the Buttons menu and the Green blocks are located in the Display menu.

```
from microbit import *  
while True:  
    if button_a.is_pressed():  
        display.show(Image.HAPPY)  
    elif button_b.is_pressed():  
        display.scroll(" Hello World ")
```



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RUNNING THE CODE

1. Click on download `.hex`. This will download the `.hex` file to your computer.
2. Plug your micro:bit into your computer using the Micro USB cable.
3. Copy the `.hex` file to your micro:bit.
4. Wait for the light on the back of the micro:bit to stop flashing.
5. Press button 1 or button 2 to see your code run.

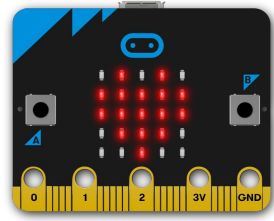
WHAT WILL HAPPEN

When button 1 is pressed you will see a happy face appear on the LED matrix on the micro:bit and when button 2 is pressed you will see the text "Hello world" scrolling across the LED matrix.

Button 1 and 2 work the same as if you pressed button A and B on the micro:bit.



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FINAL WORDS

Well done you have finished your first project using the Kitronik inventor's kit and EduBlocks. Continue with the next project for more electronics and EduBlocks fun.