

WRITE A PROGRAM TO REACT TO TOUCH

The three I/O pads on the Gemma M0 can be used as touch sensors. We can write code to control output from the Gemma M0 when one of these pads is touched.

Edit the code on your Gemma M0 or write new code. Import the touch input output library and choose pad A2 to be the touchpad. Save the code as **main.py** to the **CIRCUITPY** disk.

```
1 import board
2 import time
3 import touchio
4 import digitalio
5
6 touch = touchio.TouchIn(board.A2)
7
8 led = digitalio.DigitalInOut(board.D13)
9 led.direction = digitalio.Direction.OUTPUT
10
11 while True:
12
13     if touch.value: led.value
14         led.value = True
15         time.sleep(4)
16     else:
17         led.value = False
```

TIP:

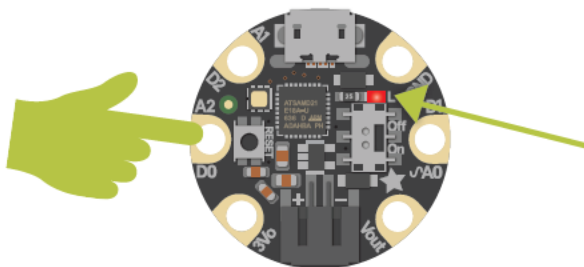
Instead of deleting lines of code that you may want to use later, click the New button and copy/paste into the untitled tab. You can then save to your desktop or another folder using any name. Later you can load this code and save to the Gemma M0 as **main.py**.

READ THE CODE

The first four lines import libraries.

Line 6 creates a variable, **touch**, that detects whether the **A2** pad is touched. Lines 8 and 9 send data to the Gemma M0 red indicator LED.

The **while True:** loop forever checks for touch on the A2 pad. If there is a touch, the red indicator LED is on for 4 seconds. Otherwise (**else**) the LED is off.



With the Gemma M0 powered on, touch the A2 pad with your finger.

The Gemma M0 red indicator LED should light and stay on for 4 seconds.