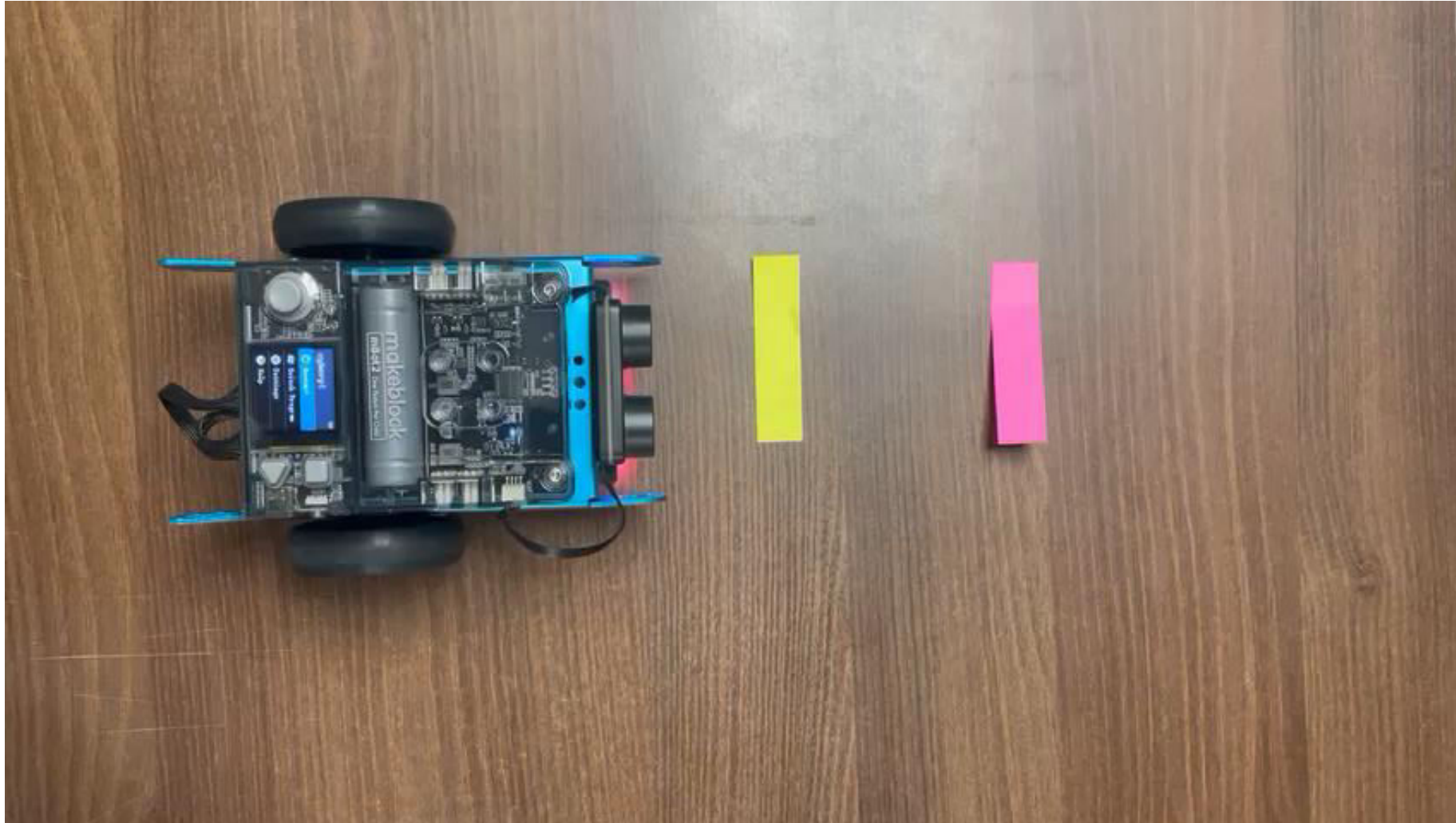


Project :Color detection using mBot and python

Let us watch this
video.....



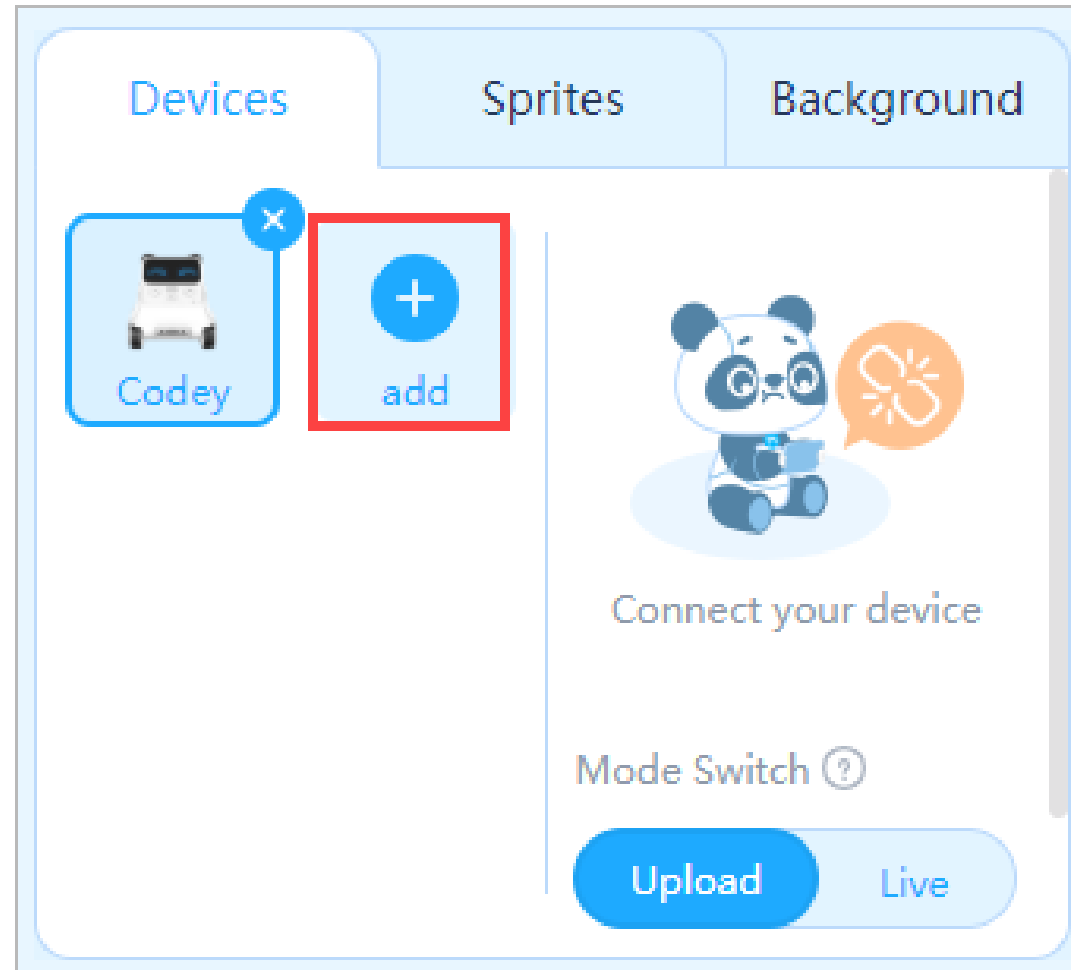
What did we see?

Observations:

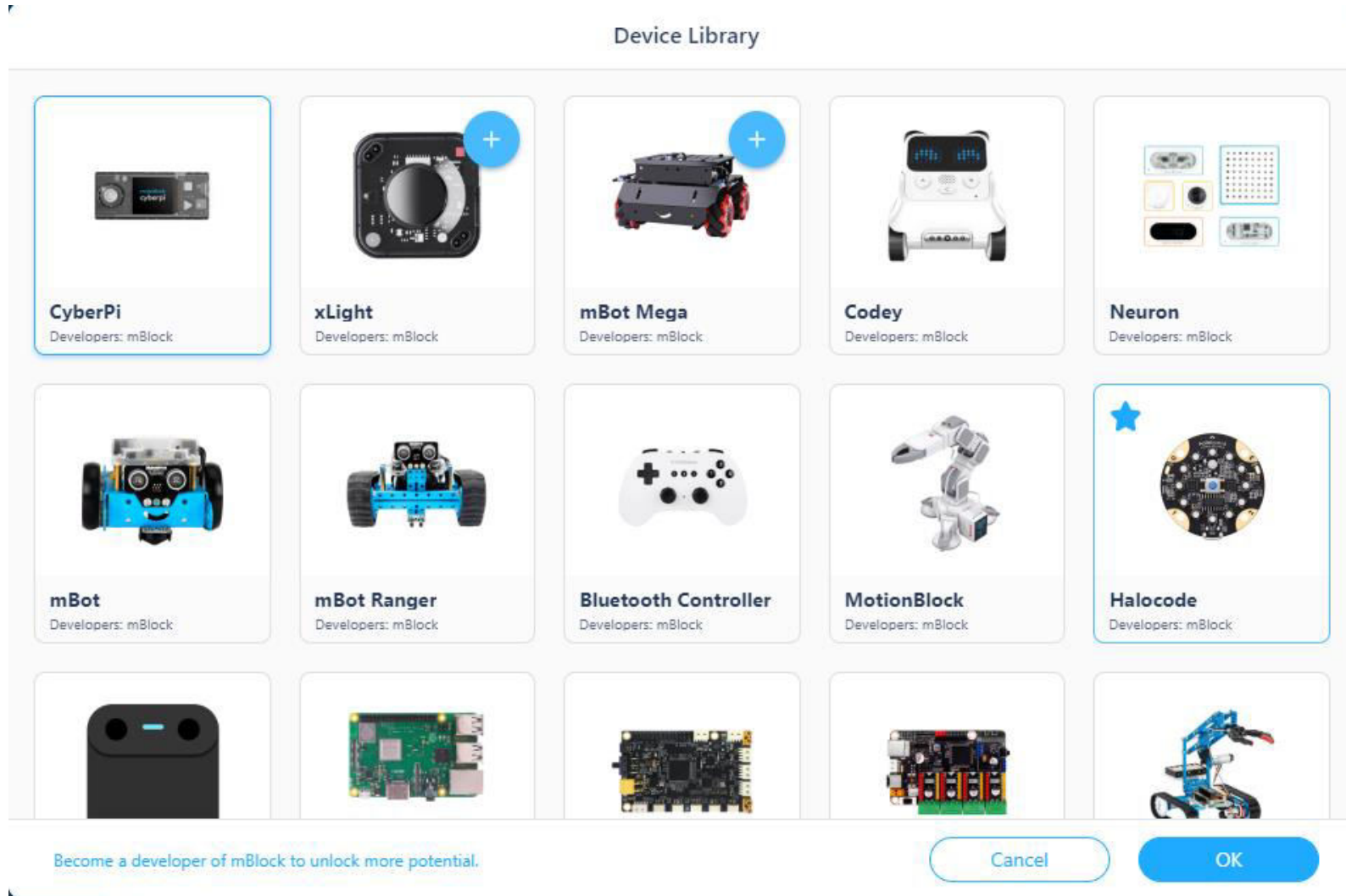
- When CyberPi start, if the RGB colour sensor detects the colorful object, robot displays same colour through LED .
- The mobt is displaying the colour name on the screen as well.

Steps to make a program

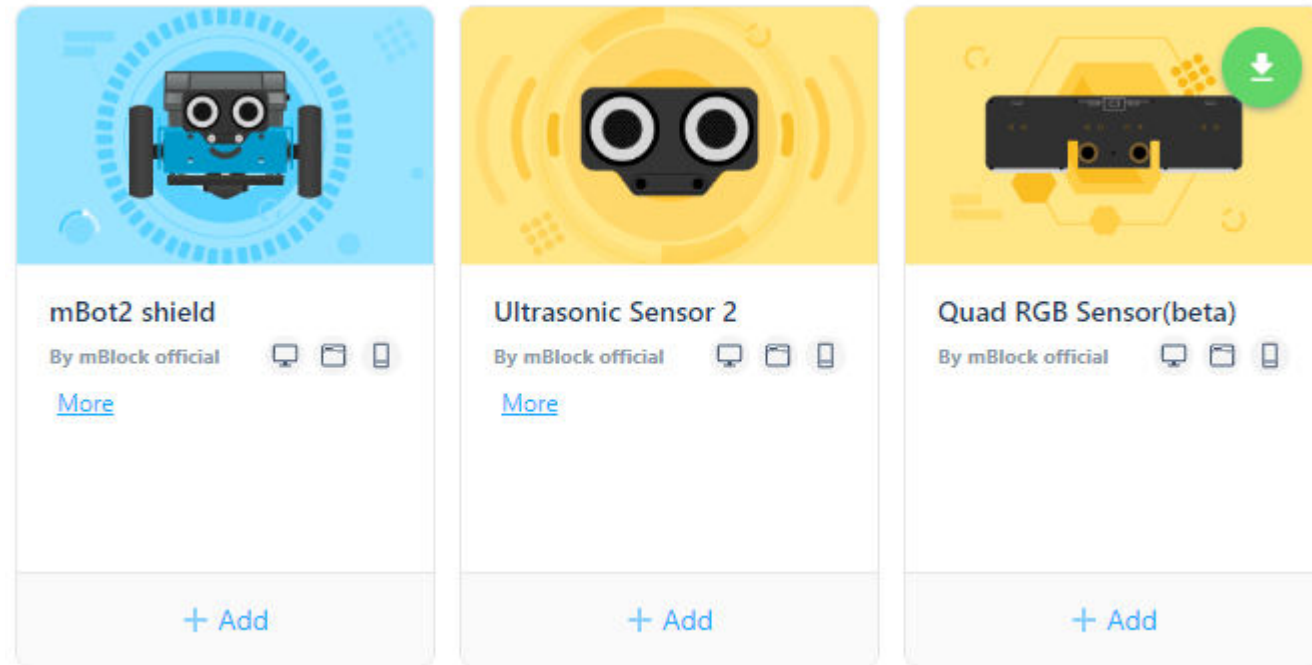
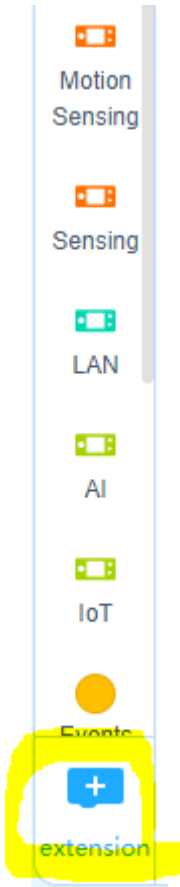
Step 1: Open mBlock Software. Go to Devices tab and click on the add button.



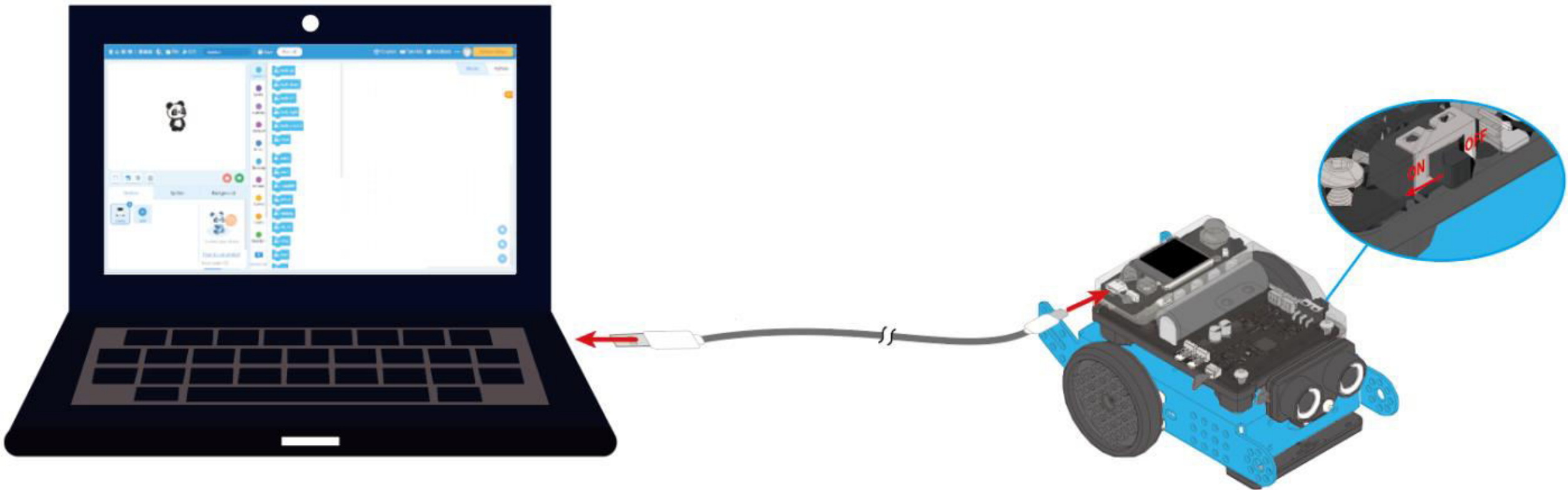
Step 2: select CyberPi as a device to program it.



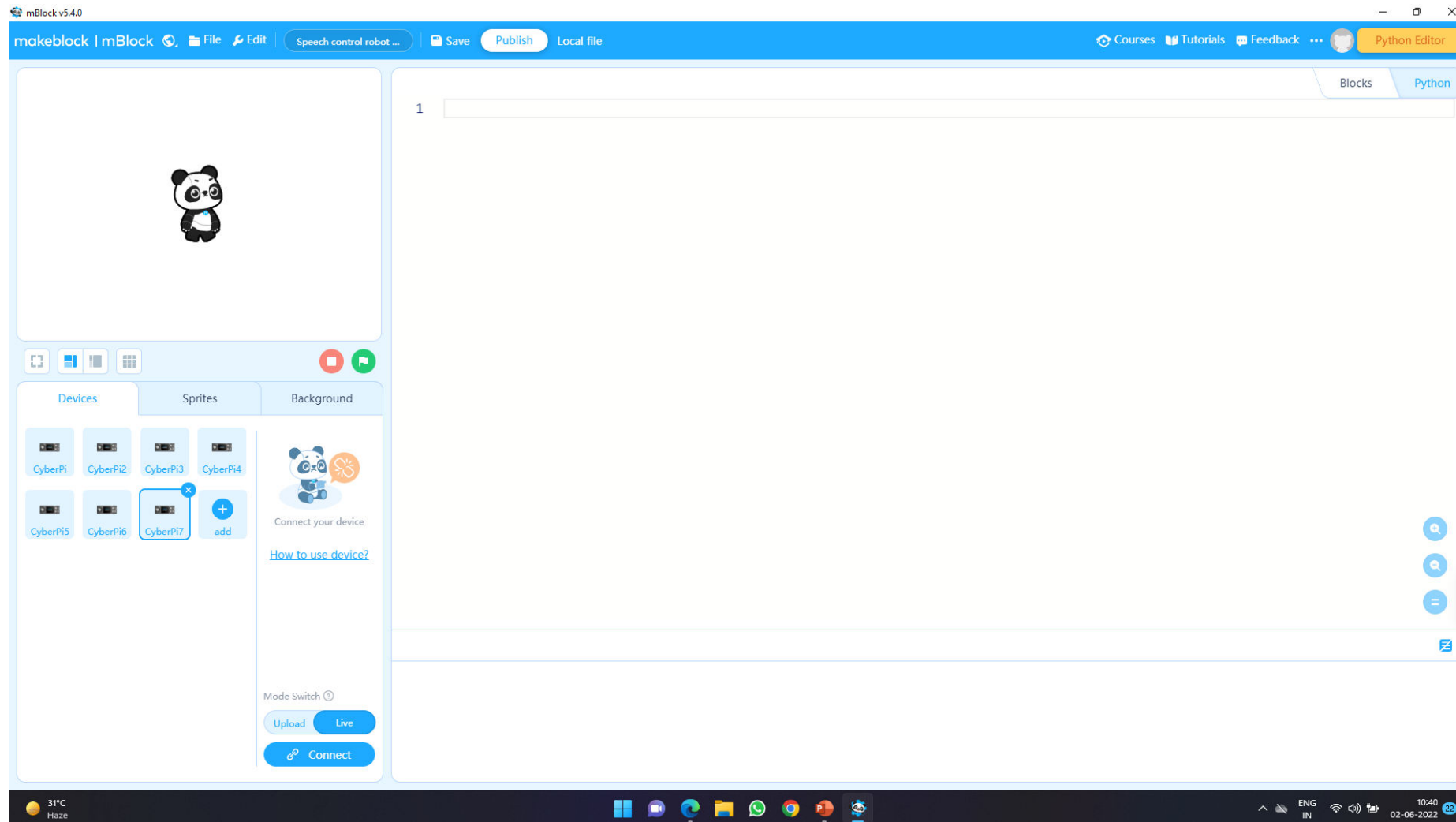
Step 3: Now, click on the extension and add following extensions one by one



Step 4: Connect mBot2 with PC using an uploading cable



Step 5: Switch to the python tab/screen to write the program.



Step6: Let us write the python program for colour detection using mBot and python

```
1  #Colour Detection Program
2  import mbuild, event, time, cyberpi
3
4  cyberpi.console.print('Colour Detection')
5  time.sleep(1)
6  while True:
7      if str(mbuild.quad_rgb_sensor.get_color_sta("R1",1)).find(str('red')) > -1:
8          cyberpi.led.on(208, 2, 27, "all")
9          cyberpi.console.clear()
10         cyberpi.display.show_label('RED', 16, "center", index= 0)
11
12         if str(mbuild.quad_rgb_sensor.get_color_sta("R1",1)).find(str('yellow')) > -1:
13             cyberpi.led.on(255, 231, 0, "all")
14             cyberpi.console.clear()
15             cyberpi.display.show_label('YELLOW', 16, "center", index= 0)
16
17             if str(mbuild.quad_rgb_sensor.get_color_sta("R1",1)).find(str('green')) > -1:
18                 cyberpi.led.on(63, 255, 0, "all")
19                 cyberpi.console.clear()
20                 cyberpi.display.show_label('GREEN', 16, "center", index= 0)
21
22                 if str(mbuild.quad_rgb_sensor.get_color_sta("R1",1)).find(str('blue')) > -1:
23                     cyberpi.led.on(3, 0, 197, "all")
24                     cyberpi.console.clear()
25                     cyberpi.display.show_label('BLUE', 16, "center", index= 0)
26
27
```

Thank you!