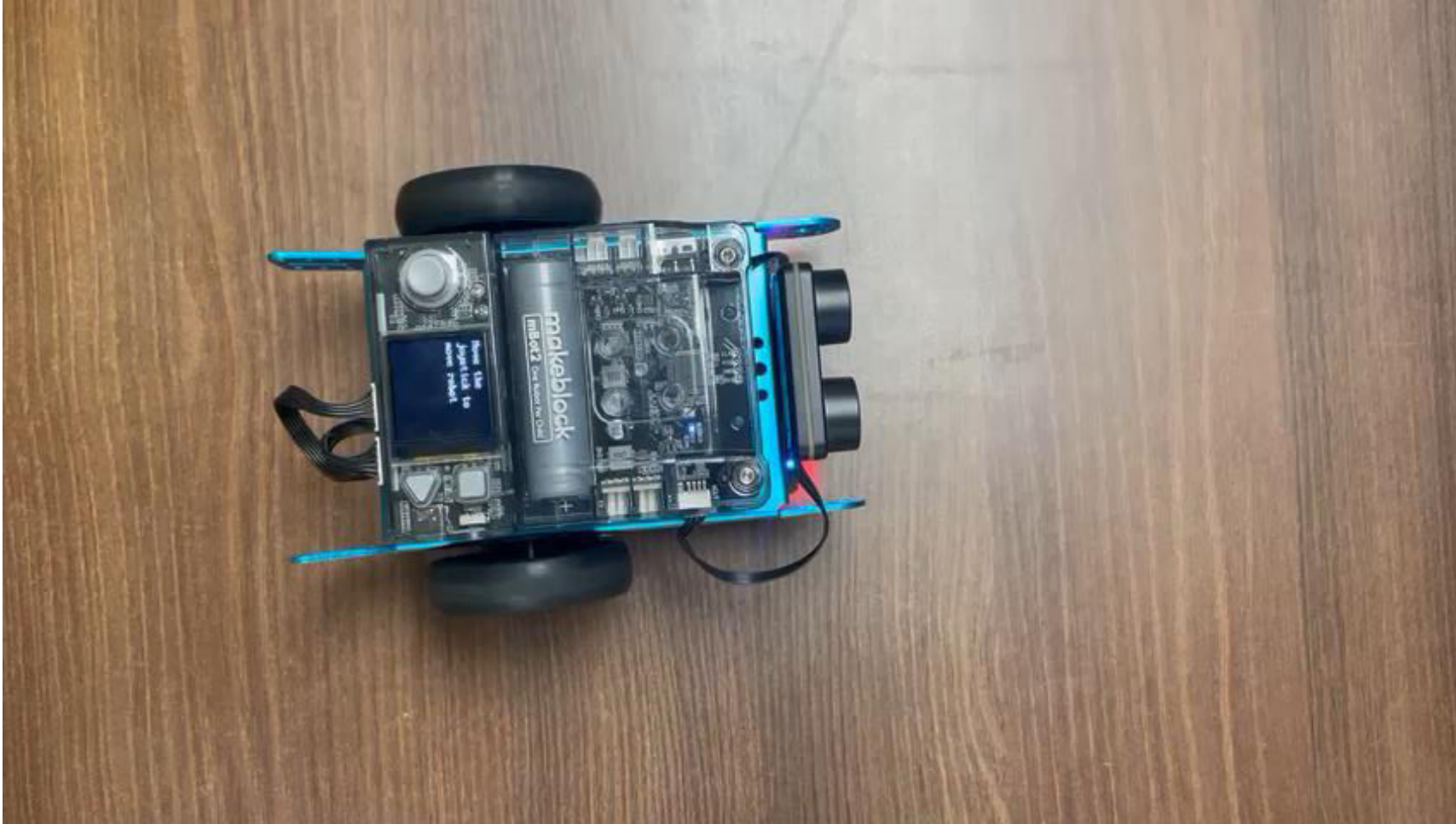


Project :Joystick Controlled Robot

Let us watch this
video.....



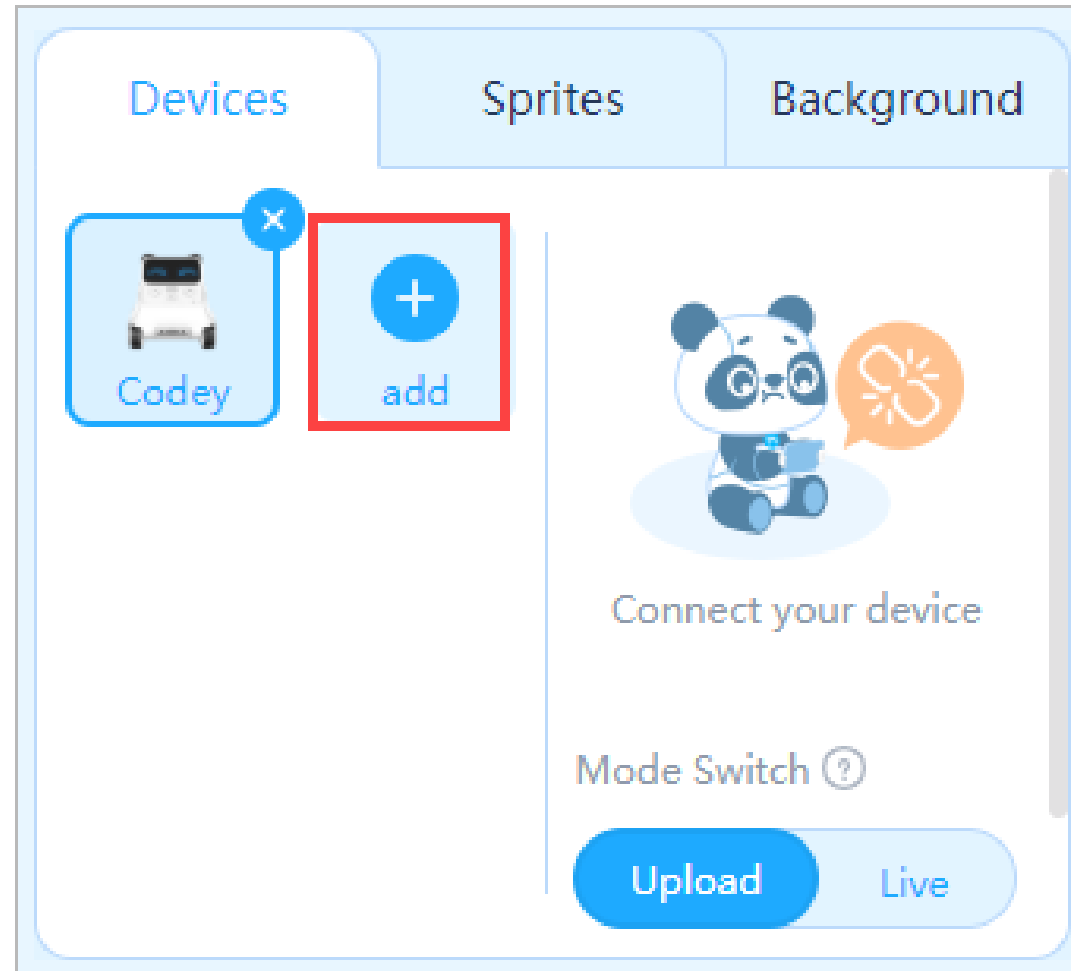
What did we see?

Observations:

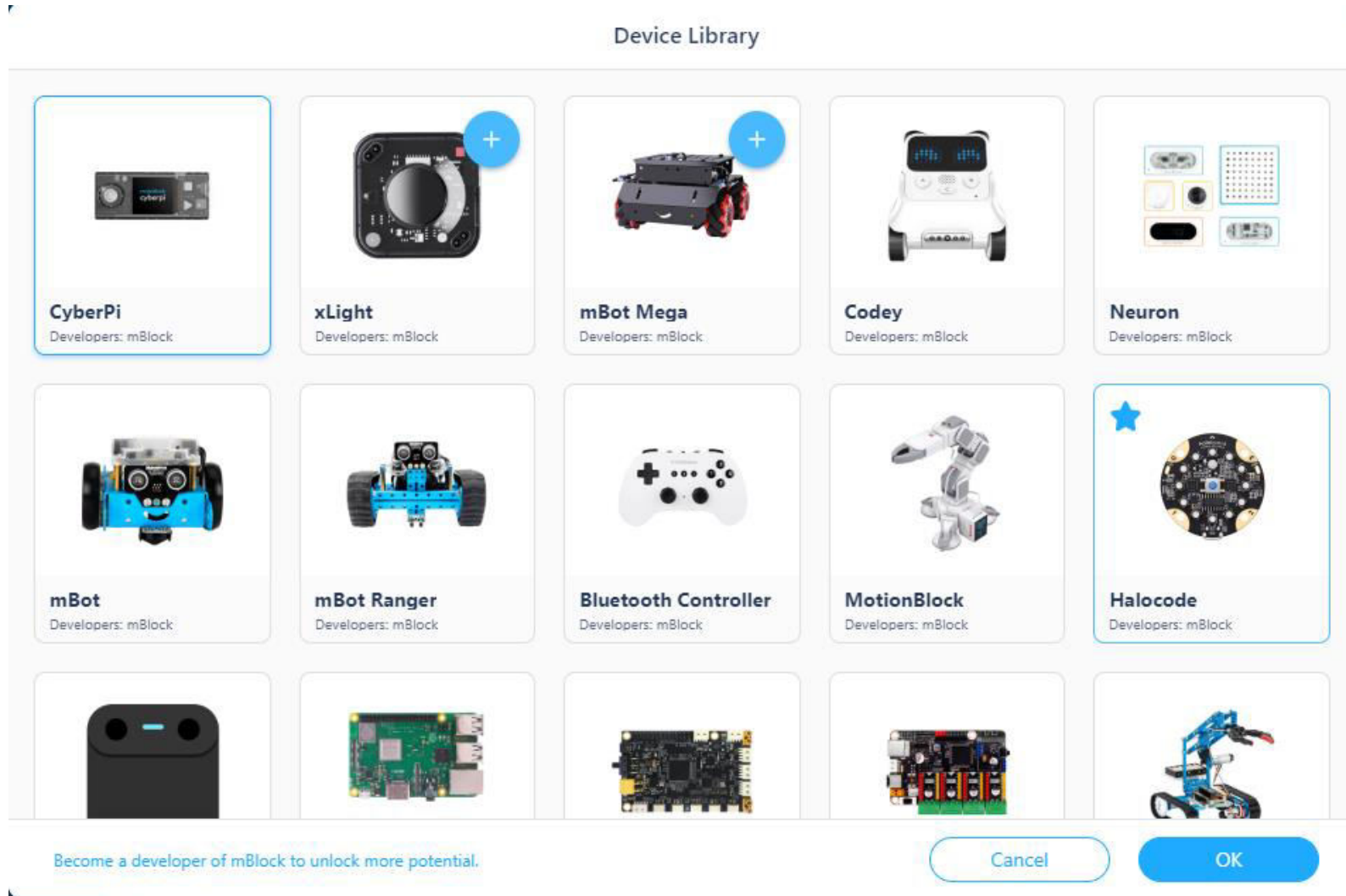
- When the joystick is pulled, the mbot is performing the actions given to mbot.
- When pulled up, it moves in a forward direction.
- When pulled down, it moves in a backward direction.
- If pulled left, it turns left and if pulled right, robot takes right turn.

Steps to make a program

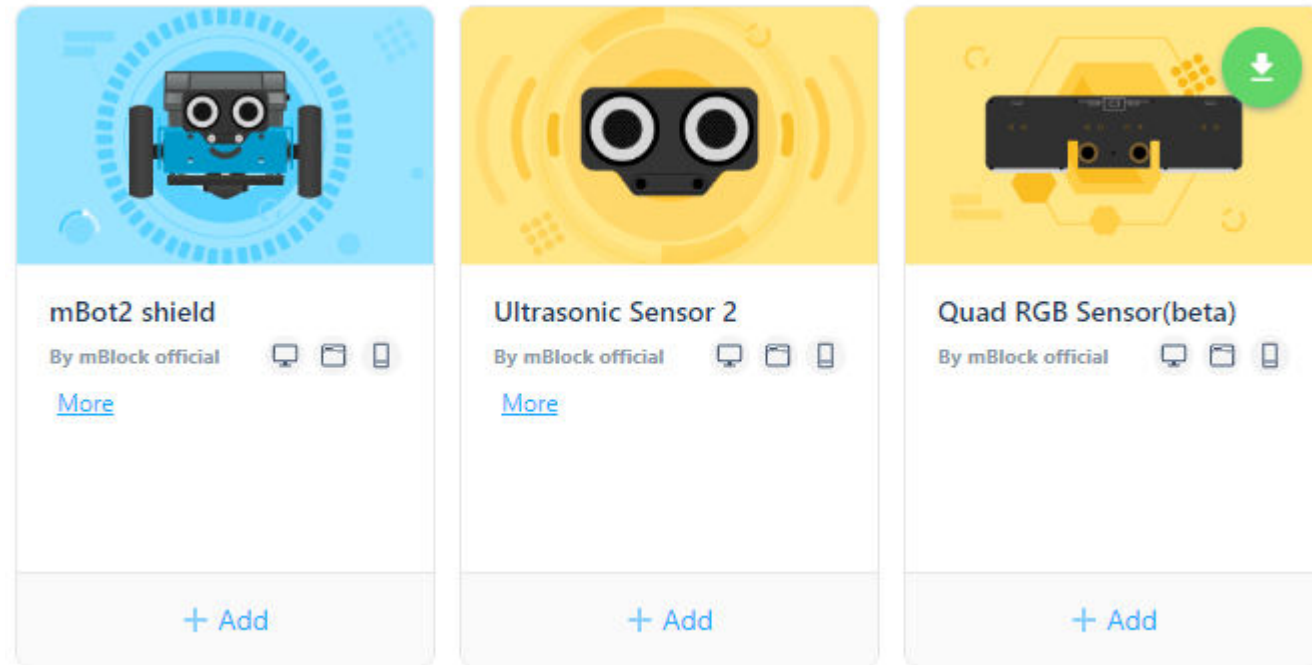
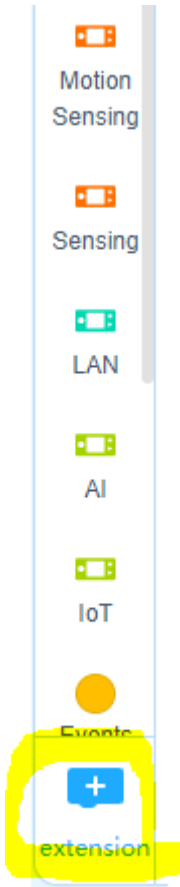
Step 1: Open mBlock Software. Go to Devices tab and click on the add button.



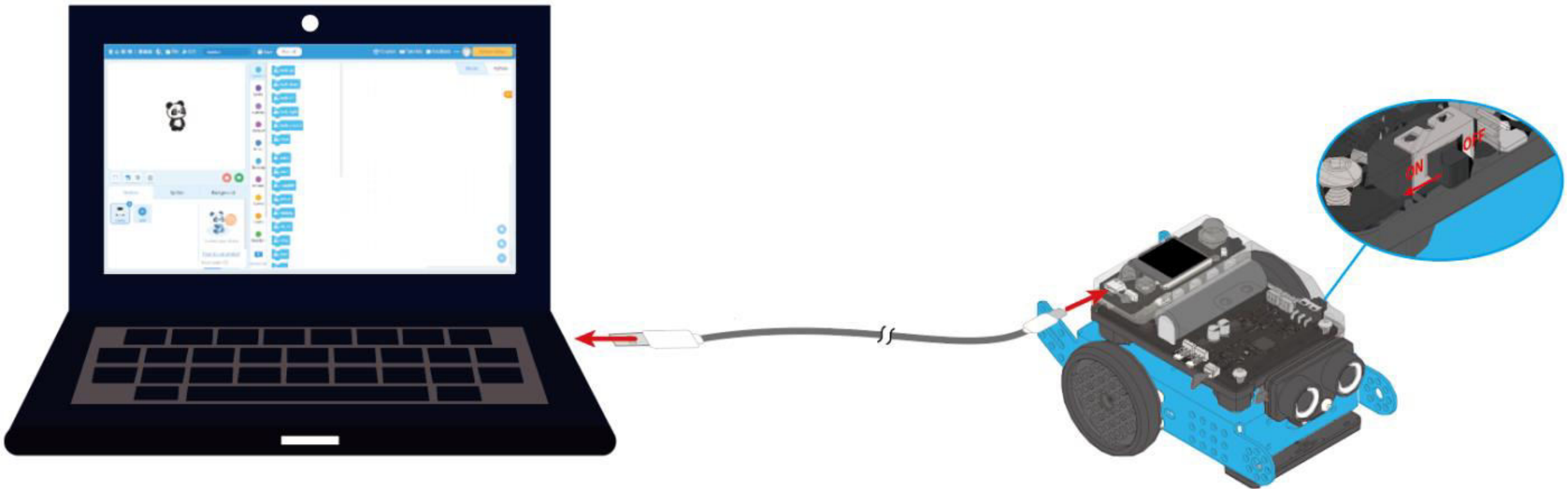
Step 2: select CyberPi as a device to program it.



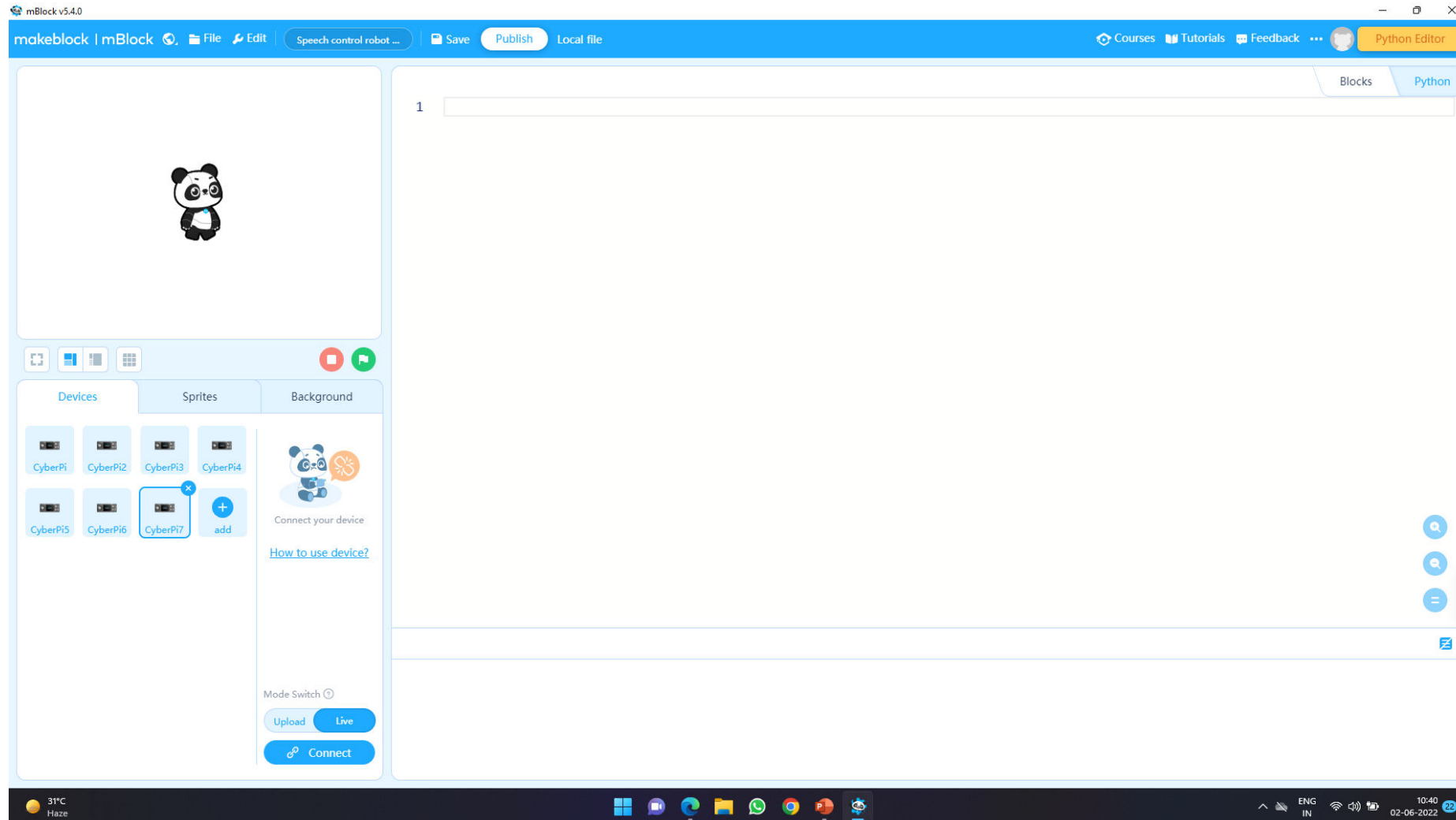
Step 3: Now, click on the extension and add following extensions one by one



Step 4: Connect mBot2 with PC using an uploading cable



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



Step6: let us write python program for “Joystick Controlled Robot”

```
1  #Robot Movement as per joystick
2  import mbot2,cyberpi
3  cyberpi.console.print('Move the joystick to move robot')
4  while True:
5      if cyberpi.controller.is_press('up'):
6          cyberpi.console.clear()
7          cyberpi.console.print('Forward')
8          mbot2.forward(50, 1)
9
10     if cyberpi.controller.is_press('down'):
11         cyberpi.console.clear()
12         cyberpi.console.print('Backward')
13         mbot2.backward(50, 1)
14
15     if cyberpi.controller.is_press('left'):
16         cyberpi.console.clear()
17         cyberpi.console.print('Left Turn')
18         mbot2.turn_left(50, 1)
19
20     if cyberpi.controller.is_press('right'):
21         cyberpi.console.clear()
22         cyberpi.console.print('Right Turn')
23         mbot2.turn_right(50, 1)
24
```

Thank you!