

Project : Piano App(Music player robot)

Let us watch this
video.....



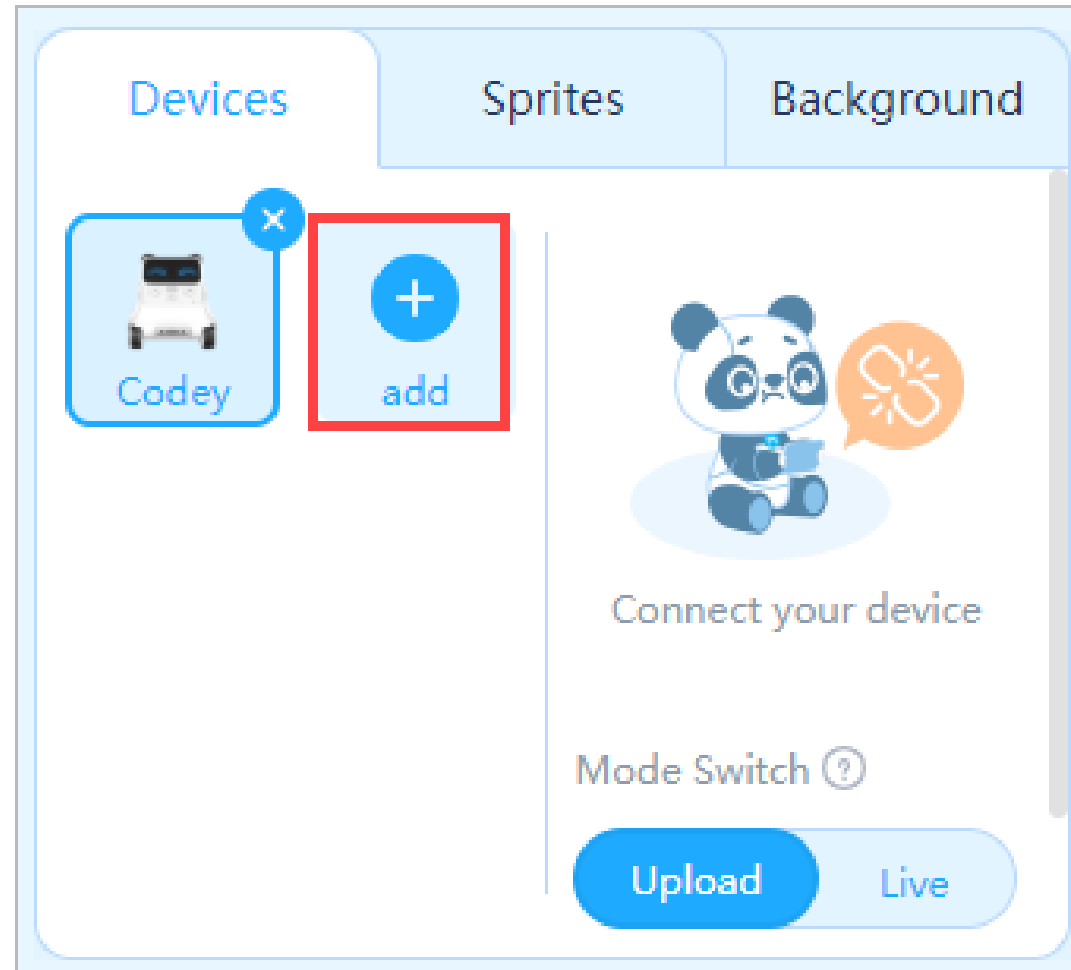
What did we see?

Observations:

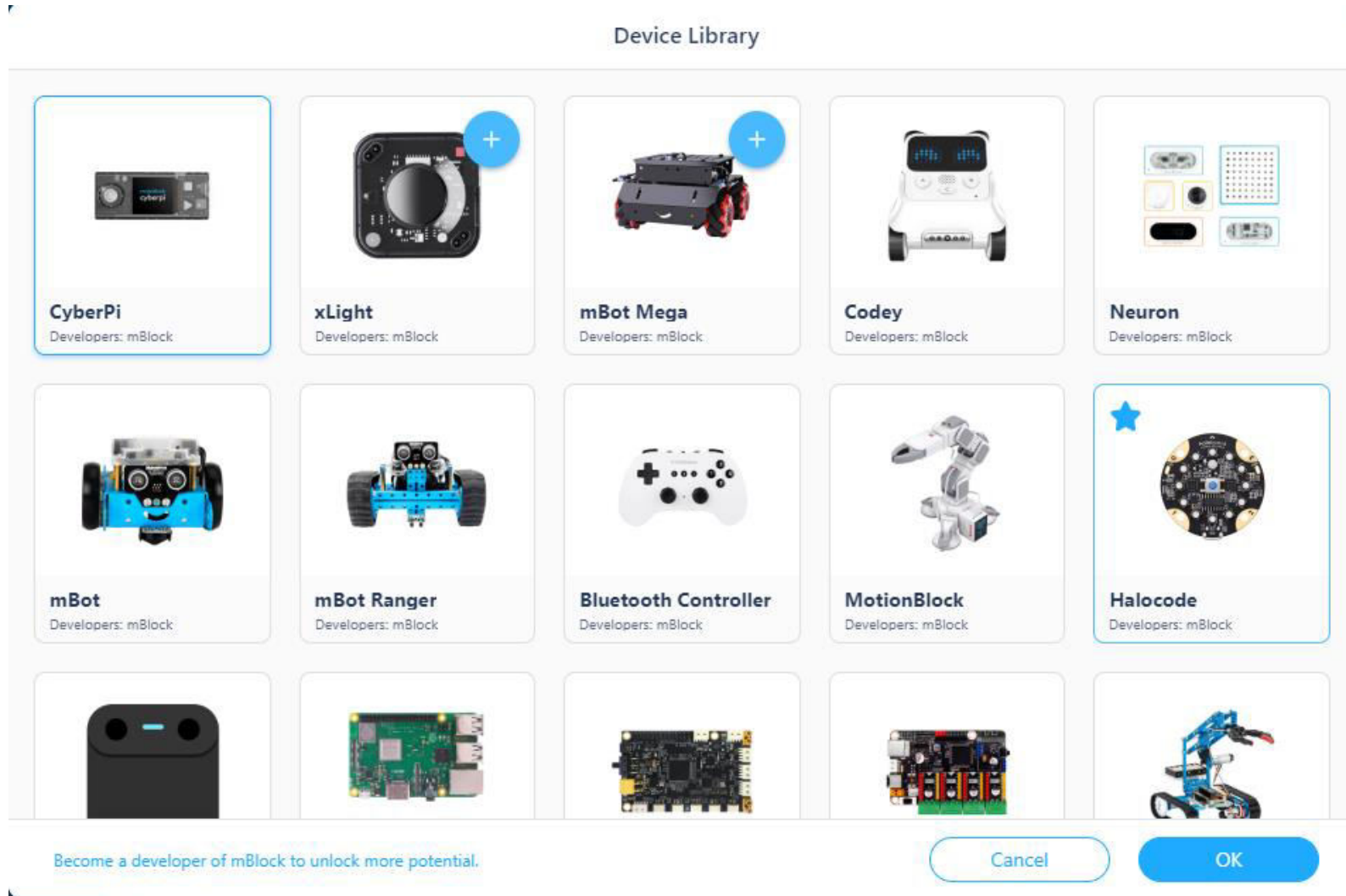
- When CyberPi start, it starts playing the music notes stored in the python program.
- Based on button pressed (A or B), mBot plays different song .

Steps to make a program

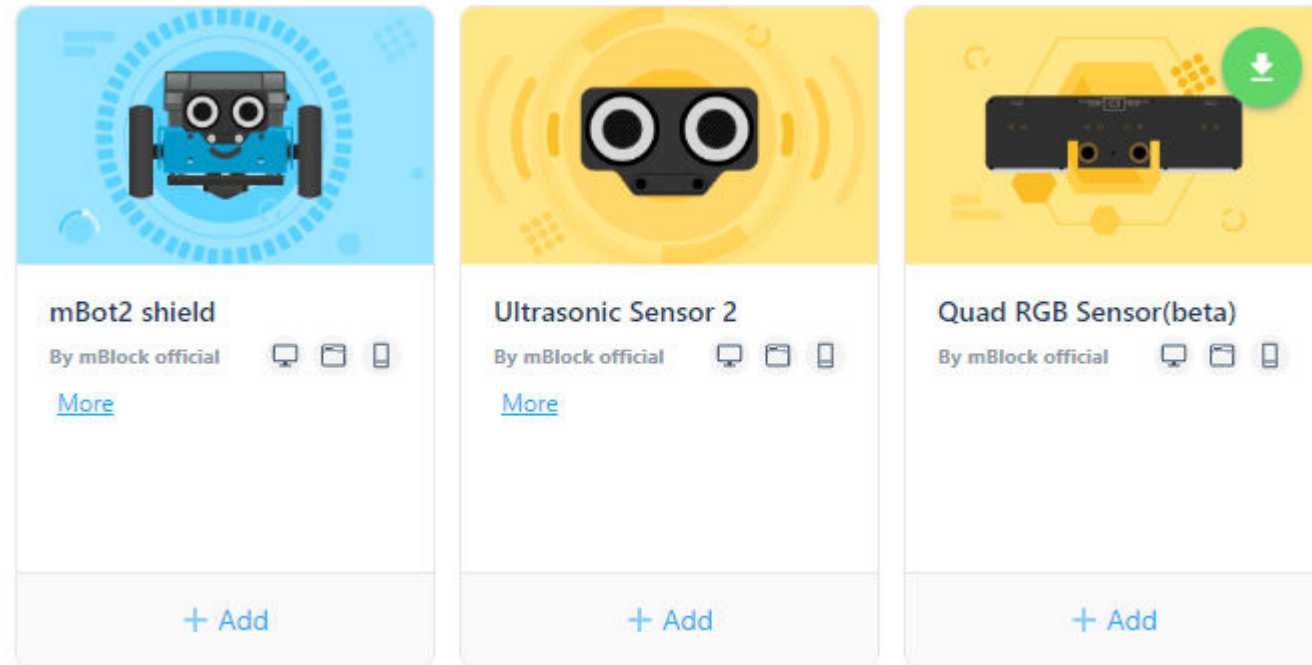
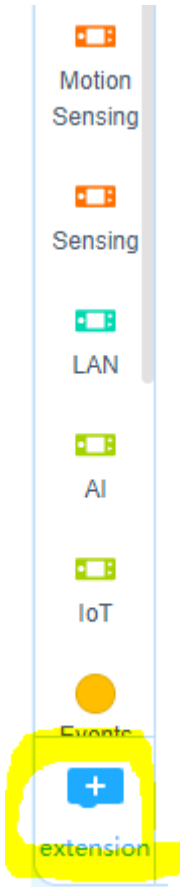
Step 1: Open mBlock Software. Go to Devices tab and click on the add button.



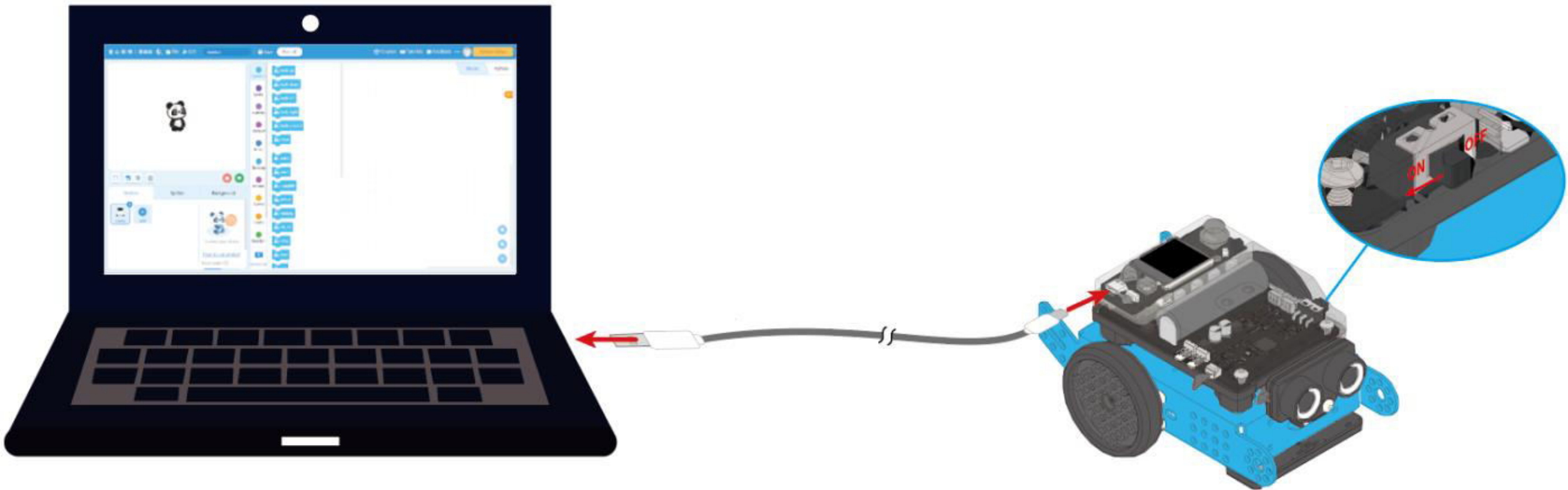
Step 2: Select CyberPi as a device to program it.



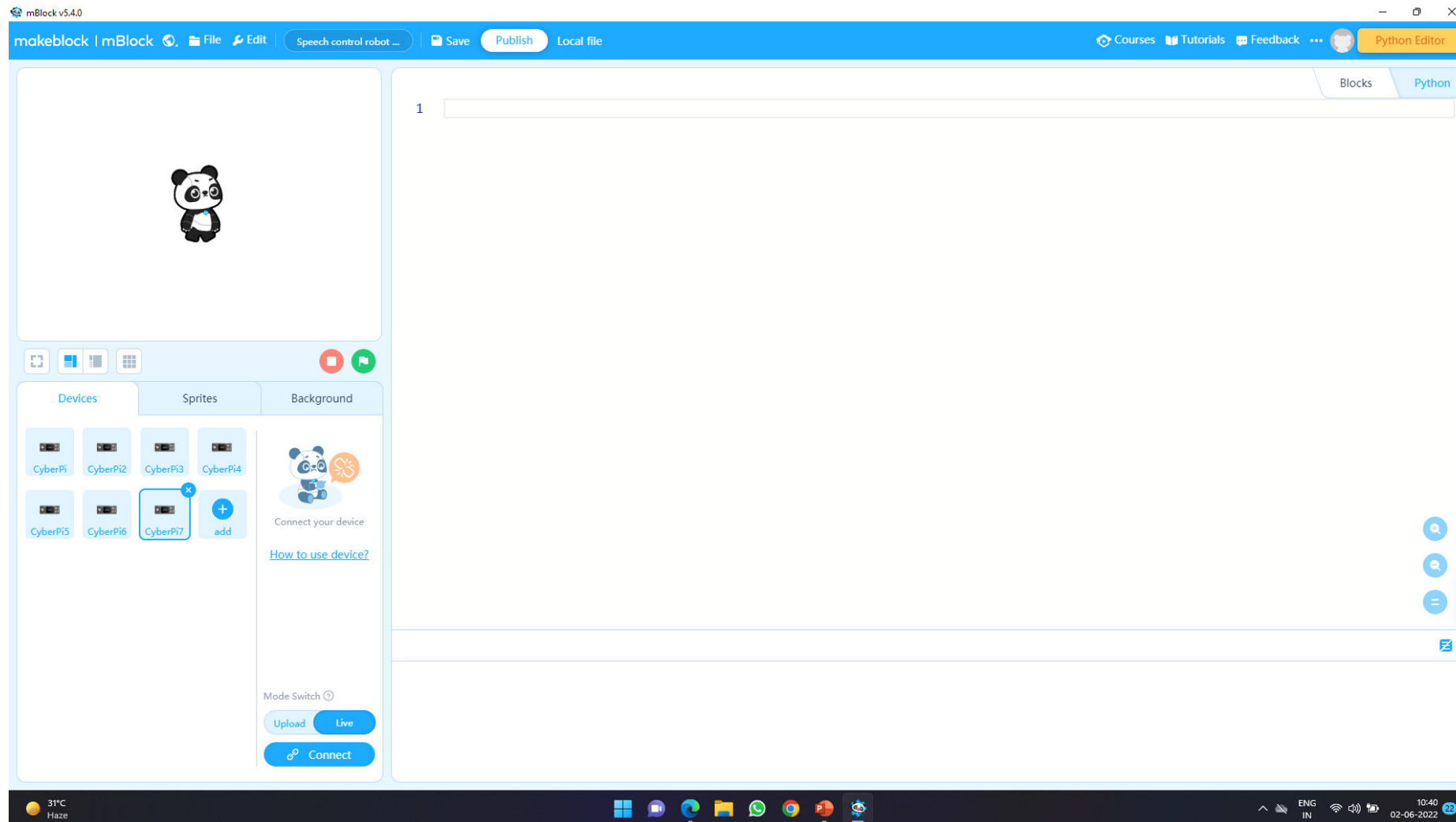
Step 3: Now, click on the extension and add following extensions one by one



Step 4: Connect mBot2 with PC using an uploading cable



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



Step6: Now write the python program for piano app (music player robot)

```

1  #Musical Piano
2  import event, time, cyberpi
3
4  @event.start
5  def on_start():
6      cyberpi.console.print('Music Player Robot')
7      cyberpi.audio.set_vol(100)
8
9  @event.is_press('a')
10 def is_btn_press():
11     for count in range(3):
12         cyberpi.audio.play_music(64, 0.25)
13
14     time.sleep(0.5)
15     for count2 in range(3):
16         cyberpi.audio.play_music(64, 0.25)
17
18     time.sleep(0.5)
19     for count11 in range(2):
20         cyberpi.audio.play_music(64, 0.25)
21         cyberpi.audio.play_music(67, 0.25)
22         cyberpi.audio.play_music(60, 0.25)
23         cyberpi.audio.play_music(62, 0.25)
24         cyberpi.audio.play_music(64, 0.25)
25         time.sleep(0.5)
26     for count3 in range(3):
27         cyberpi.audio.play_music(65, 0.25)
28
29     time.sleep(0.5)
30     for count4 in range(2):
31         cyberpi.audio.play_music(65, 0.25)
32
33     for count5 in range(4):
34         cyberpi.audio.play_music(64, 0.25)
35
36     cyberpi.audio.play_music(64, 0.25)
37     cyberpi.audio.play_music(62, 0.25)

```

Program continue...

```
37 cyberpi.audio.play_music(62, 0.25)
38 cyberpi.audio.play_music(62, 0.25)
39 cyberpi.audio.play_music(64, 0.25)
40 cyberpi.audio.play_music(62, 0.25)
41 time.sleep(0.2)
42 cyberpi.audio.play_music(67, 0.25)
43 time.sleep(0.2)
44 for count6 in range(5):
45     cyberpi.audio.play_music(64, 0.25)
46
47 cyberpi.audio.play_music(64, 0.25)
48 cyberpi.audio.play_music(67, 0.25)
49 cyberpi.audio.play_music(60, 0.25)
50 cyberpi.audio.play_music(62, 0.25)
51 cyberpi.audio.play_music(64, 0.25)
52 time.sleep(0.5)
53 for count7 in range(3):
54     cyberpi.audio.play_music(65, 0.25)
55
56 time.sleep(0.5)
57 for count8 in range(2):
58     cyberpi.audio.play_music(65, 0.25)
59
60 for count9 in range(4):
61     cyberpi.audio.play_music(64, 0.25)
62
63 cyberpi.audio.play_music(64, 0.25)
64 cyberpi.audio.play_music(62, 0.25)
65 cyberpi.audio.play_music(62, 0.25)
66 cyberpi.audio.play_music(64, 0.25)
67 cyberpi.audio.play_music(62, 0.25)
68 time.sleep(0.2)
69 cyberpi.audio.play_music(67, 0.25)
70 time.sleep(0.2)
71 for count10 in range(5):
72     cyberpi.audio.play_music(64, 0.25)
73
```

Program continue...

```
73
74 @event.is_press('b')
75 def is_btn_press1():
76     cyberpi.audio.play_music(67, 0.25)
77     cyberpi.audio.play_music(67, 0.25)
78     cyberpi.audio.play_music(69, 0.25)
79     cyberpi.audio.play_music(67, 0.25)
80     cyberpi.audio.play_music(60, 0.25)
81     cyberpi.audio.play_music(71, 0.25)
82     time.sleep(0.5)
83     cyberpi.audio.play_music(67, 0.25)
84     cyberpi.audio.play_music(67, 0.25)
85     cyberpi.audio.play_music(69, 0.25)
86     cyberpi.audio.play_music(67, 0.25)
87     cyberpi.audio.play_music(62, 0.25)
88     cyberpi.audio.play_music(60, 0.25)
89     time.sleep(0.5)
90     cyberpi.audio.play_music(67, 0.25)
91     cyberpi.audio.play_music(67, 0.25)
92     cyberpi.audio.play_music(67, 0.25)
93     cyberpi.audio.play_music(64, 0.25)
94     cyberpi.audio.play_music(60, 0.25)
95     cyberpi.audio.play_music(71, 0.25)
96     cyberpi.audio.play_music(67, 0.25)
97     time.sleep(0.5)
98     cyberpi.audio.play_music(65, 0.25)
99     cyberpi.audio.play_music(65, 0.25)
100    cyberpi.audio.play_music(64, 0.25)
101    cyberpi.audio.play_music(60, 0.25)
102    cyberpi.audio.play_music(62, 0.25)
103    cyberpi.audio.play_music(60, 0.25)
104
105
```

Thank you!