Lab 7- Grove Kit Light Sensor, Gesture Sensor and Speaker
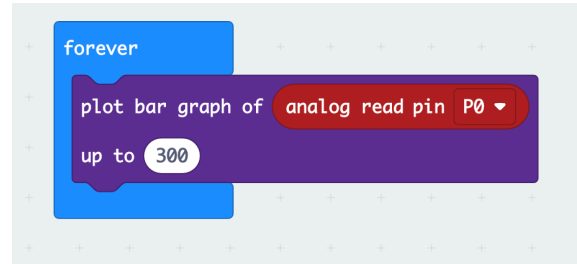
Exercise 1:

Code:

```
1  basic.forever(function () {
2      led.plotBarGraph(
3      pins.analogReadPin(AnalogPin.P0),
4      300
5      )
6  })
7
```

Video Demo: https://drive.google.com/file/d/1AcFgudQ5_qc3nDtn3uftr4DVeojmR6IE/view?usp=sharing

https://drive.google.com/file/d/1t6UjpSKGtTwoBEUpBgEL8ZQ8UBd2_V3G/view?usp=sharing
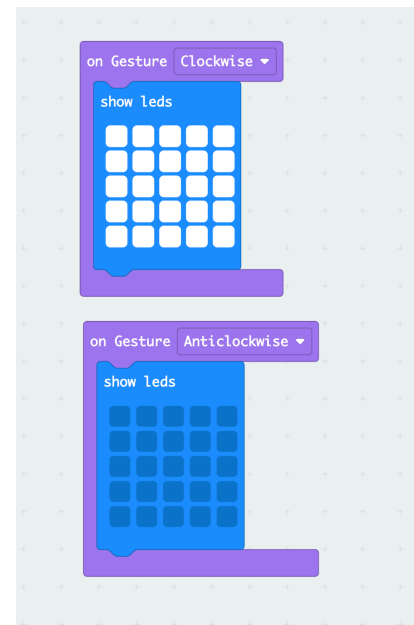
Exercise 2:

Code:

```
1  grove.onGesture(GroveGesture.Clockwise, function () {
2      basic.showLeds(`
3          # # # # #
4          # # # # #
5          # # # # #
6          # # # # #
7          # # # # #
8          `)
9  })
10 grove.onGesture(GroveGesture.Anticlockwise, function () {
11     basic.showLeds(`
12         . . . . .
13         . . . . .
14         . . . . .
15         . . . . .
16         . . . . .
17         `)
18 })
19
```

Video Demo: https://drive.google.com/file/d/1PDlIzVw5Zlip4tqJkOaTmOUopikMVLiT/view?usp=sharing
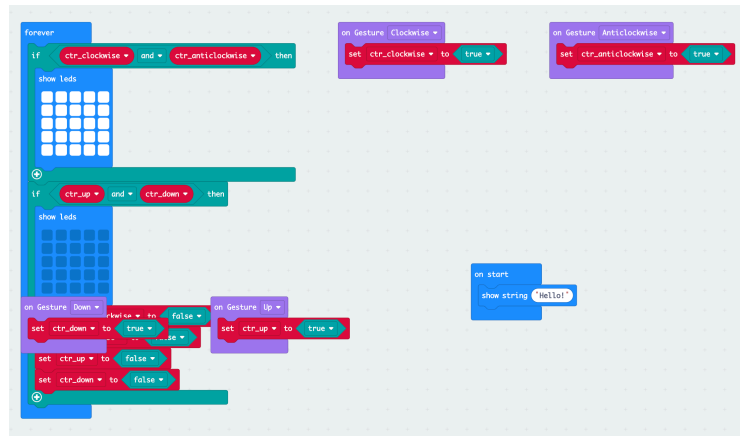
Exercise 3:

Code:

```
1  grove.onGesture(GroveGesture.Down, function () {
2      ctr_down = true
3  })
4  grove.onGesture(GroveGesture.Clockwise, function () {
5      ctr_clockwise = true
6  })
7  grove.onGesture(GroveGesture.Up, function () {
8      ctr_up = true
9  })
10 grove.onGesture(GroveGesture.Anticlockwise, function () {
11     ctr_anticlockwise = true
12 })
13 let ctr_anticlockwise = false
14 let ctr_up = false
15 let ctr_clockwise = false
16 let ctr_down = false
17 basic.forever(function () {
18     if (ctr_clockwise && ctr_anticlockwise) {
19         basic.showLeds(`
20             # # # # #
21             # # # # #
22             # # # # #
23             # # # # #
24             # # # # #
25             `)
26     }
27     if (ctr_up && ctr_down) {
28         basic.showLeds(`
29             . . . . .
30             . . . . .
31             . . . . .
32             . . . . .
33             . . . . .
34             `)
35         ctr_anticlockwise=false
36         ctr_clockwise=false
37         ctr_up = false
38         ctr_down = false
39     }
40
41 })
42
43
```


Video Demo: https://drive.google.com/file/d/198RHy5G2gjbH_0Q7J0lj4DnifPTworRe/view?usp=sharing
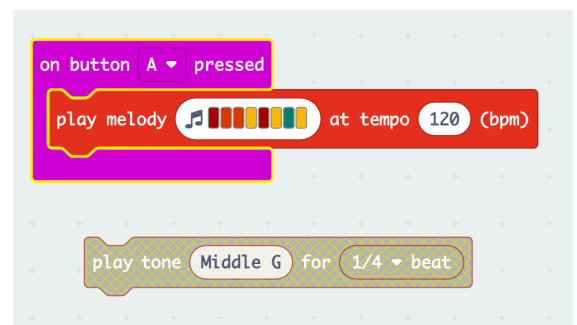
Exercise 4:

Code:

```
1  input.onButtonPressed(Button.A, function () {
2      music.playMelody("C5 B B A C5 A F A ", 120)
3  })
4
```


Video Demo: https://drive.google.com/file/d/1vmqjCrWrnRsYtFgZYETnHfP_12ybzjAM/view?usp=sharing