

```
1 from ht16k33segment_python import HT16K33Segment
2 import smbus
3 import time
4
5
6
7 def count(max, display, delay=1):
8     if max < 0:
9         max = 0
10    if max > 9998:
11        max = 9998
12    for i in range(0, max + 1):
13        bcd = int(str(i), 16)
14        display.set_number((bcd & 0xF000) >> 12, 0)
15        display.set_number((bcd & 0x0F00) >> 8, 1)
16        display.set_number((bcd & 0xF0) >> 4, 2)
17        display.set_number((bcd & 0x0F), 3)
18        display.update()
19        time.sleep(delay)
20
21
22 def anim(number, display, delay=1):
23     state = True
24     up = 99
25     down = 92
26     for i in range(0, number):
27         display.clear()
28         display.set_glyph(up if state else down, 0)
29         display.set_glyph(down if state else up, 1)
30         display.set_glyph(up if state else down, 2)
31         display.set_glyph(down if state else up, 3)
32         display.update()
33         time.sleep(delay)
34         state = not state
35
36
37 i2c = smbus.SMBus(1)
38 led = HT16K33Segment(i2c)
39 led.set_brightness(15)
40
41 count(1000, led, 0.01)
42 time.sleep(9)
43
44 led.clear()
45 led.set_number(8, 0, True)
46 led.set_number(8, 1, True)
47 led.set_number(8, 2, True)
48 led.set_number(8, 3, True)
49 led.set_colon(True)
50 led.update()
51 time.sleep(10)
52
53 led.clear()
```

```
54 led.set_char("b", 0)
55 led.set_char("e", 1)
56 led.set_char("e", 2)
57 led.set_char("f", 3)
58 led.update()
59
60 led.set_blink_rate(1)
61
62 time.sleep(10)
63
64 led.set_blink_rate(0)
65
66 time.sleep(10)
67
68 anim(20, led, 0.5)
69 time.sleep(8)
70
71 led.clear()
72 led.update()
73
```