```
. . .
 2
 3
                m m
                                              m m
 9
        EEET-418
       27 April 2022
     * Senior Project: Smart package Delivery Box
12
13
14
     * The purpose of this program is to act as the keypad.py
15
     * file for the SPDB project. It is intended to be imported
     * into the main program.
16
17
     * Created by: Brandon Empie & Angel Crim
18
     21
23
     import RPi.GPIO as GPIO
24
     import time
25
     C1 = 26
26
     C2 = 19
27
     C3 = 13
28
     C4 = 6
29
     R1 = 21
     R2 = 20
31
     R3 = 16
32
     R4 = 12
33
34
     class glo:
        pinSequence = ""
35
         masterPin = "8 6 7 5 "
36
         markedFull = "# A "
37
38
39
     GPIO.setwarnings(False)
40
     GPIO.setmode(GPIO.BCM)
41
     GPIO.setup(C1, GPIO.OUT)
42
     GPIO.setup(C2, GPIO.OUT)
     GPIO.setup(C3, GPIO.OUT)
GPIO.setup(C4, GPIO.OUT)
43
44
     GPIO.setup(R1, GPIO.IN, pull up down=GPIO.PUD DOWN)
     GPIO.setup(R2, GPIO.IN, pull_up_down=GPIO.PUD_DOWN)
GPIO.setup(R3, GPIO.IN, pull_up_down=GPIO.PUD_DOWN)
GPIO.setup(R4, GPIO.IN, pull_up_down=GPIO.PUD_DOWN)
46
47
48
49
51
     def readC1():
52
        GPIO.output(C1, 1)
53
         if(GPIO.input(R1)):
54
            glo.pinSequence += "1 "
55
         if(GPIO.input(R2)):
56
            glo.pinSequence += "4 "
57
         if(GPIO.input(R3)):
58
            glo.pinSequence += "7 "
59
         if(GPIO.input(R4)):
            glo.pinSequence += "* "
60
61
         GPIO.output(C1, 0)
62
         time.sleep(.1)
63
         return
     def readC2():
64
65
         GPIO.output(C2, 1)
66
         if(GPIO.input(R1)):
67
            glo.pinSequence += "2 "
68
         if(GPIO.input(R2)):
            glo.pinSequence += "5 "
69
         if(GPIO.input(R3)):
70
71
            glo.pinSequence += "8 "
72
         if(GPIO.input(R4)):
            glo.pinSequence += "0 "
74
         GPIO.output(C2, 0)
75
         time.sleep(.1)
76
         return
77
     def readC3():
78
         GPIO.output(C3, 1)
79
         if(GPIO.input(R1)):
            glo.pinSequence += "3 "
80
         if(GPIO.input(R2)):
81
82
            glo.pinSequence += "6 "
         if(GPIO.input(R3)):
```

```
glo.pinSequence += "9 "
85
         if(GPIO.input(R4)):
            glo.pinSequence += "# "
86
 87
         GPIO.output(C3, 0)
 88
          time.sleep(.1)
 89
         return
 90
     def readC4():
 91
        GPIO.output(C4, 1)
 92
         if(GPIO.input(R1)):
 93
            glo.pinSequence += "A "
 94
         if(GPIO.input(R2)):
           glo.pinSequence += "B "
 95
 96
         if(GPIO.input(R3)):
97
            glo.pinSequence += "C "
98
          if(GPIO.input(R4)):
           glo.pinSequence += "D "
99
100
         GPIO.output(C4, 0)
101
         time.sleep(.1)
102
         return
103
```

104 105