

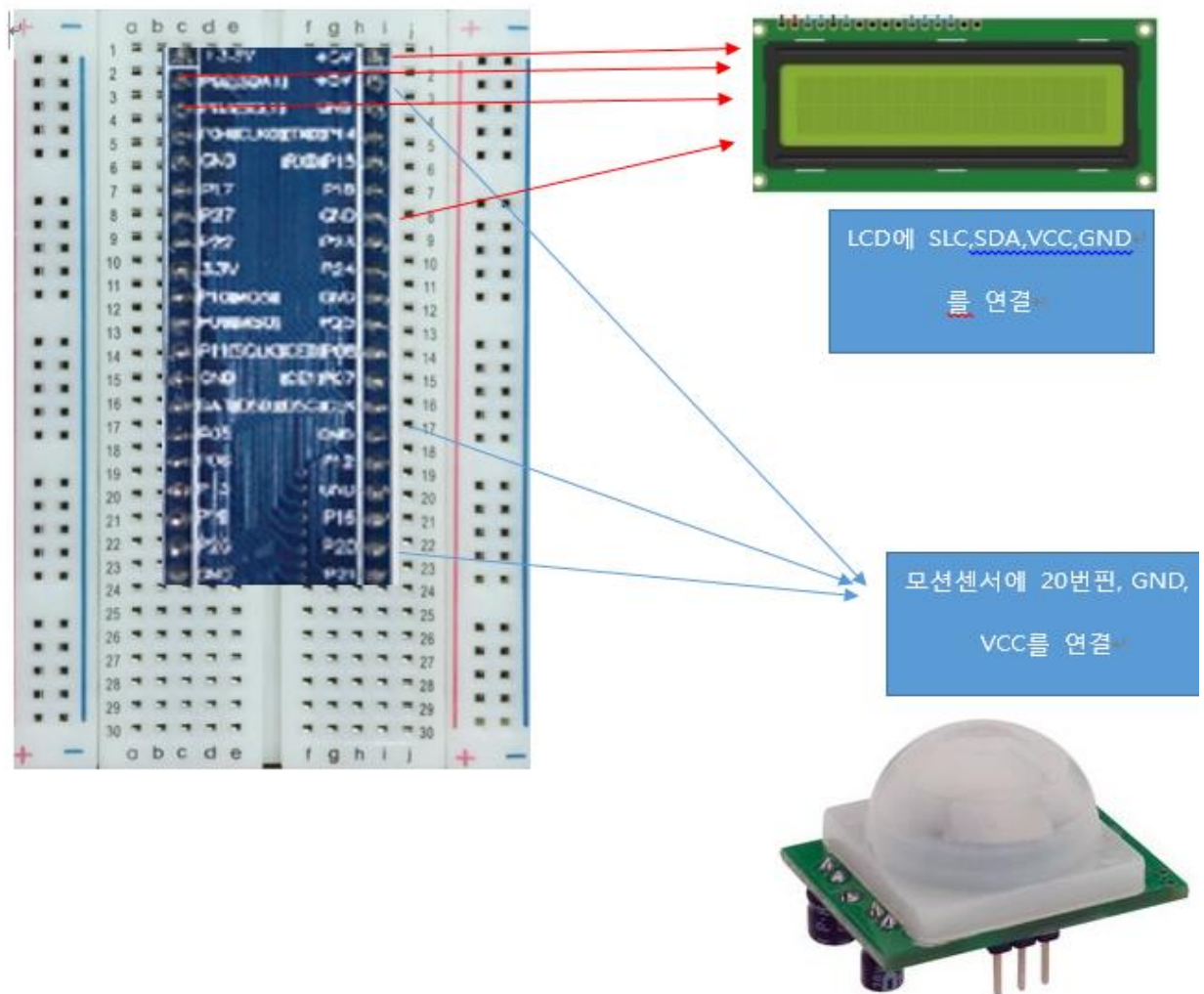
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Title: Using motion sensor to detect someone and showing by LCD

1. Project description

I used pin number 20 to detect motion sensor. The motion sensor detect period is about 0.2second. If something detected, console print "motion detected!!!" and flicker LCD light. If nothing detected at motion sensor, console print "not detected!!!" and LCD keep turning on.

2. System Overview



3. Environment

LCD1602

Motion sensor

I2C-tools

4. Source code

```
1  import LCD1602
2  import time
3  import RPi.GPIO as GPIO
4  |
5  GPIO.setmode(GPIO.BCM)
6  PIR_PIN = 20
7  led = 13
8
9  GPIO.setup(PIR_PIN, GPIO.IN)
10 GPIO.setup(led, GPIO.IN)
11
12 try:
13     print "Test start"
14     time.sleep(2)
15     print "Ready"
16
17     while True:
18         if GPIO.input(PIR_PIN):
19             t = time.localtime()
20             print "%d:%d:%d motion detected!" % (t.tm_hour, t.tm_min, t.tm_sec)
21             LCD1602.init(0x3f,0)
22
23         else:
24             print "not detected!!!!!!!!!!!!!!"
25
26         time.sleep(0.2)
27 except KeyboardInterrupt:
28     print "stop"
29     GPIO.cleanup()
30
```