Instructions:

• Begin by discussing with your partner and instructor how you would write a set of instructions, a computer program, for lights to turn on for each step

• Using the Function Bank, fill in the functions where they belong

• “Comment” your code. In other words, translate the machine language to something you understand. Look for loops and if statements

Firewalker Code:

```cpp
#include <Firewalker.h>
#include <Adafruit_NeoPixel.h>

#define N_LEDS 
#define SENSOR_PIN 
#define LED_PIN 

#define STEP_DOWN_THRESHOLD
#define STEP_UP_THRESHOLD 

boolean stepping = false;

Firewalker firewalker(SENSOR_PIN, N_LEDS, STEP_UP_THRESHOLD);
Adafruit_NeoPixel strip = 
Adafruit_NeoPixel(N_LEDS, LED_PIN, NEO_GRB + NEO_KHZ800);

void setup() {
    
    strip.begin();
}
```
void loop() {

if (firewalker.getSensorValue() > STEP_UP_THRESHOLD) {
    stepping = false;
}

if (firewalker.getSensorValue() < STEP_DOWN_THRESHOLD) {
    stepping = true;
}

firewalker.updateStep(stepping);

for (int i = 0; i < N_LEDS; ++i) {
    strip.setPixelColor(i, firewalker.getLEDColor(i));
}

delayMicroseconds(1500);
}
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