

LED



Introduction

This class allows you to control LED's (Light Emitting Diodes) that are connected to the Raspberry Pi by turning them on, off or into a pulsing state. This class is very basic but can be easily implemented and expanded upon in more complex examples.

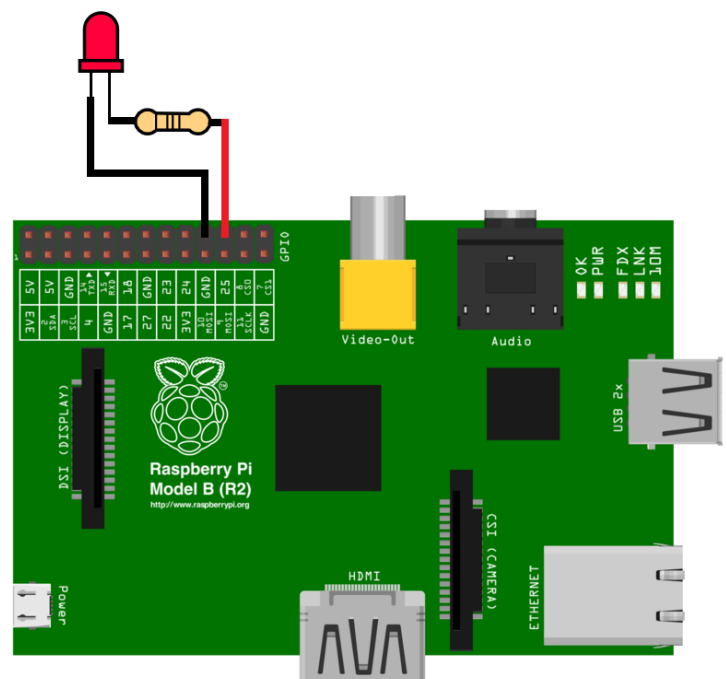
Assembly

Parts:

- LED
- 2x Jumper cables
- Resistors (what type?)
- Raspberry Pi

Build Instructions:

1. Ensure the Raspberry Pi is powered off completely.
2. Connect the longer LED leg to the resistor.
3. Connect the shorter leg to the ground pin with a jumper cable.
4. Connect the other end of the resistor to pin 22 with a jumper cable.



Exercises

Exercise 1: Complete the `flashXTimes()` method in the `LEDEXercises` class. This should make the LED flash X amount of times, with X being a parameter. You may want to use the `Thread.sleep(milliseconds)` method in order to stagger the flashes.

Exercise 2: Complete the `ledWithButton()` method in the `LEDEXercises` class. This should combine with a button so that when the button is pressed, the LED

turns on.

Notes

- Remember, Pi4J using something called WiringPi to manage GPIO pins. This means that the pin numbers do not actually correlate with what is written on the board. Use this website to convert:
<http://pi4j.com/pins/model-b-plus.html>