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CSE121

Lab 6 report

Due: 5/24/2023

lab6_1.c

- chatGPT prompt:

    write c code to activate an led connected to a rasberry pi. The command should have a string as one of the arguments which is shown as morse code on the led. There should be an array used convert characters to morse values. It should also take into account spaces between words in morse code. Also, it must convert the entire message into an array representing the morse code message before transmitting the morse message through the LED.

- Changed GPIO pin to 26
- Uses wiringPi.h

lab6_2.c (also used for part 3)

- Added on to lab6_1.c with a function from chatGPT prompt:

    write a c function that converts a string of morse characters into human readable characters"

- While loop reads raw voltage data value from the adc channel, uses a threshold value of 40 to check when the diode senses the light turning on or off. Time unit value measures how long light is on or off and this is used to see if there is a ' ', '/', '.', or '-' in morse.
- Used 10ms rate for unit transmission rate of LED and the process delay of the diode.