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ECE-350-001

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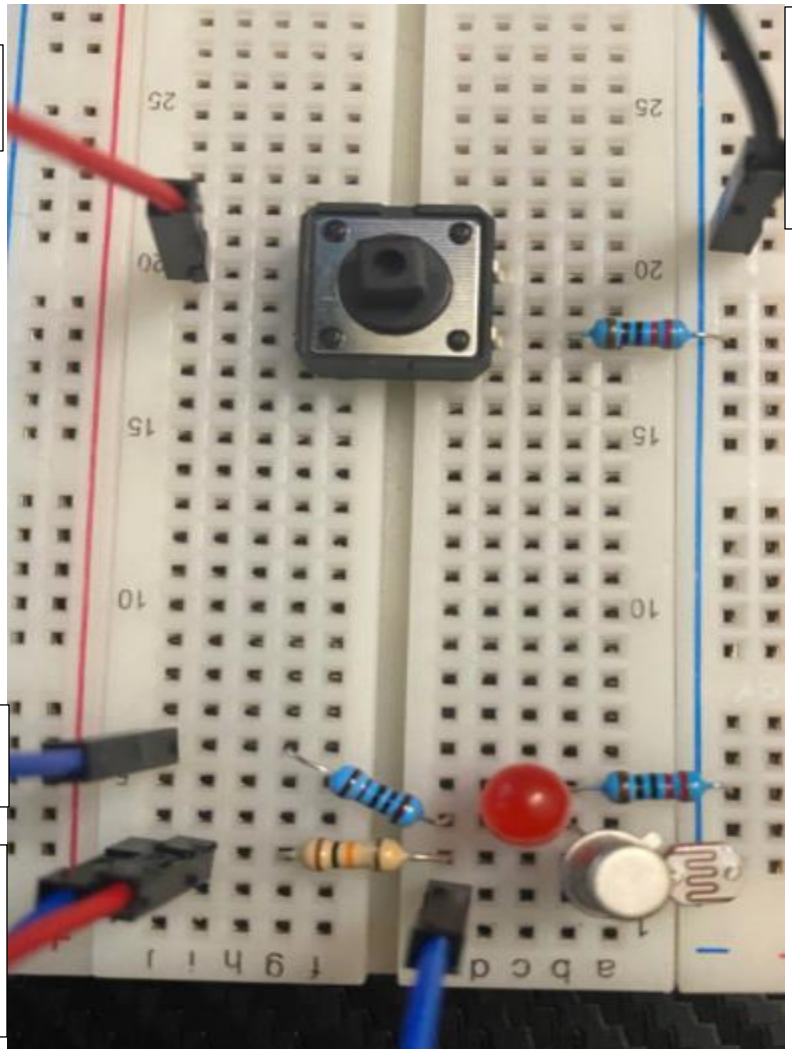
Lab 4: Intelligent Lighting Controller

Description: The purpose of this lab is to create a dark sensor led circuit that will turn off in the light and on in the darkness while having some extra features such is outputting when the led was turned off or on and for how long has the led been turned off or on. The last feature is a push button switch that will act as a manual override button to manually set the led status.

Breadboard:

Red wire is to pin 16

Black wire is common ground connected to pin 6



This blue wire is connected to pin 12

Red wire is power for transistor connected to pin 1. Blue wire extends power to collector of transistor

Questions:

1. Rmax = 8~20k Rmin = 1M Ω R_{req} = 10k Ω

2. We can input between + or – 5 mA