# how long until 5?

## project desc.

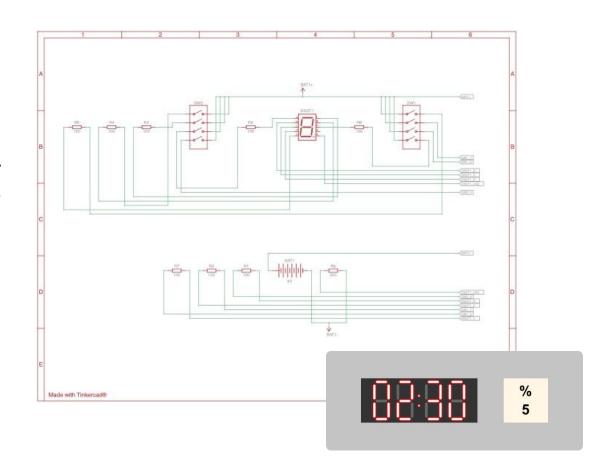
I intend to build a timer until 5 pm. This timer will have a single button that activates a 7 segment display showing how long until 5.

This project is useful as it displays information relevant to a workplace, while being useless by providing mundane information that does not need to be automated. I hope to poke fun at the automation of silly/mundane tasks and the monotony of the workday/workcycle.

## images + schematics

I intend to control the display through an RPi GPIO, using a script that responds to the key's input.

Circuit to the right reflects a single 7-segment display controlled by switches.



#### materials

- Permanent Circuit Board
- Wires + Resistors
- RPi
- Red 7-segment clock display (\$3.95)
- Old keyboard key (input contact switch)

#### tutorials

Using 7-segment display through RPi:

- <u>Interface Seven Segment Display with Raspberry Pi</u> by Smit Shah, Oct. 2020
- How to drive a 7 segment display directly on Raspberry Pi in Python by Alex Eames in RasPi.TV, Nov. 2015

Reading a button/switch input on a python script:

- How to Use Push Buttons With Raspberry Pi GPIO (with <u>Python gpiozero</u>) by M Heidenreich, Nov. 2020
- Raspberry Pi Button Input by BurgZerg Arcade, Jan. 2017

# inspiration



The Key



Dice Roll Calculator

#### milestones

- 1. Working python script (outputs the correct time until 5pm on given input)
- 2. Breadboard circuit
- 3. Permanent Circuit
- 4. Design/Print Case