Flowchart

Start

Normal Mode

Is Button Preesed?

No → Keep in normal mode " change car's led every 5 sec "

Yes → Human Mode → Is car red led on?

Is car red led on? **Yes** → Human's green led and car's red led will be on for 5 sec

Is car red led on? **No** → Is car green led or Yellow led on ?

Is car green led or Yellow led on ? **Yes** → Human's red led will be on then both yellow led will be blink for 5 sec then car's red led and human's green led will be on for 5 sec

Car's red led will be off and both yellow led will blink for 5 sec while human's green led still on

Human's green led will be off and both human's red led and car's green led will be on

Finish

Description

1. Checking the mode(Normal, Pedstrians)
2. Assuming Normal mode
1. turn off all LEDs, to prevent the errors if it return from the pedestrain's mode
2. turn on cars' Red LED and the pedestrian's Green LED
• check if the user push the button during this duration or not, to call the pedestrian's mode
3. blink cars' Yellow LED and turn on the pedestrians' Red LED
• check if the user push the button during this duration or not, to call the pedestrian's mode
4. Trun on cars' Green LED and blink the pedestrians' Yellow LED
3. Assuming Pedestrians' mode
1. check the color of cars' LED when the pedestrian push the button
2. implement the mode according to the cars' LED color
3. continue the pedestrain mode until led cars pass
1. turn off cars' Red LED
2. blink cars' Yellow LED and pedestrians' Yellow LED for 5 s
3. Turn off Pedestrian's Yellow and Green LEDs and cars' Yellow LED
4. Turn on cars' Red LED and the pedestrian's Green LED, to let cars pass
• After finishing the pedestrian mode the normal mode will be run