Assignment -1

Python Programming

Assignment Date	02 October2022
Student Name	HAAKASH I
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Maximum Marks	2 Marks

Question-1: Write a python code for LED blinking and traffic with raspberry pi

Code:

import time

import RPi.GPIO as GPIO

GPIO.setmode(GPIO.BOARD)

GPIO.setup(10, GPIO.OUT)

GPIO.setup(13, GPIO.OUT)

GPIO.setup(15, GPIO.OUT)

while True:

GPIO.output(10,True) ## Turn on redLed

time.sleep(1) ## Wait for one second

GPIO.output(10,False) ## Turn off redLed

time.sleep(1) ## Wait for one second

GPIO.output(13,True) ## Turn on yellowLed

time.sleep(1) ## Wait for one second

GPIO.output(13,False) ## Turn off yellowLed

time.sleep(1) ## Wait for one second

GPIO.output(15,True) ## Turn on greenLed

time.sleep(1) ## Wait for one second

GPIO.output(15,False) ## Turn off greenLed

time.sleep(1) ## Wait for one second

from gpiozero import Button, TrafficLights, Buzzer from time import sleep

```
buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)
while True:
  button.wait_for_press()
  buzzer.on()
  light.green.on()
  sleep(1)
  lights.amber.on()
  sleep(1)
  lights.red.on()
  sleep(1)
  lights.off()
  buzzer.off()
```