Assignment -3

Python Programming

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Maximum Marks	2 Marks

Question-1:

Write a python code for led blinking in raspberry pi

SOLUTION:

import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library

from time import sleep # Import the sleep function from the time

module

GPIO.setwarnings(False) # Ignore warning for now

GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

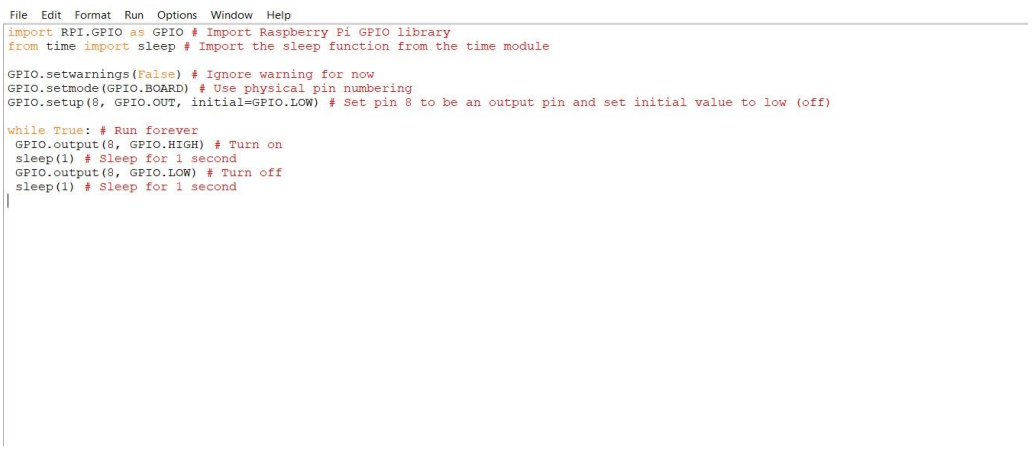
while True: # Run forever

GPIO.output(8, GPIO.HIGH) # Turn on

sleep(1) # Sleep for 1 second

GPIO.output(8, GPIO.LOW) # Turn off

sleep(1) # Sleep for 1 second



Question-2:

Write a python code for traffic light in raspberry pi

SOLUTION:

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

buzzer = Buzzer(18)
button = Button(22)
lights=TrafficLights(25,9, 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()
```

```
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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()
```