

Assignment -3

Python code for Raspberry pi

Assignment Date	28-October-2022
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Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi.

Python code for blinking LED using *Raspberry pi*:

```
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
```

Python code for TRAFFIC LIGHTS for Raspberry pi:

```
1. from gpiozero import Button, TrafficLights, Buzzer
2. from time import sleep
3.
4. buzzer = Buzzer(15)
5. button = Button(21)
6. lights = TrafficLights(25, 8, 7)
7.
8. while True:
9.     button.wait_for_press()
10.    buzzer.on()
11.    light.green.on()
12.    sleep(1)
13.    lights.amber.on()
14.    sleep(1)
15.    lights.red.on()
16.    sleep(1)
17.    lights.off()
18.    buzzer.off()
```