

Assignment -3
Internet of Things (IoT)

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| Assignment Date | 5 October 2022 |
| Student Name | Shruthi S.S |
| Student Roll Number | 310619106316 |
| Maximum Marks | 2 Marks |

Question-1:

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

ANSWER

python code for blinking LED

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

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()
```