

Assignment - 3
Internet of Things (IoT)

Assignment Date	12 November 2022
Student Name	M.Phinehas Kirubakaran
Student Roll Number	310619106095
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()
```