ASSIGNMENT-3

PYTHON PROGRAMMING IN RASPBERRY PI

Assignment Date	17 October 2022
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Maximum Marks	2 Marks

QUESTION:

Write a Python code for blinking LED and Traffic lights for Raspberry pi.

(Only Python code is enough, no need to execute in Raspberry Pi)

SOLUTION:

1) BLINKING LED

```python
import RPi.GPIO as GPIO
from time import sleep
GPIO.setwarnings(False)

LED_PIN = 17

GPIO.setmode(GPIO.BCM)
GPIO.setup(LED_PIN,GPIO.OUT)
try:
    while True:
            GPIO.output(LED_PIN, GPIO.HIGH)
            time.sleep(1)
            GPIO.output(LED_PIN, GPIO.LOW)
            time.sleep(1)
except KeyboardInterrupt:
    GPIO.cleanup()
```

2) TRAFFIC LIGHT SYSTEM

```
red = 11
yellow = 13
green = 15

GPIO.setup(red, GPIO.OUT, initial-GPIO,LOW)
GPIO.setup(yellow, GPIO.OUT, initial-GPIO,LOW)
GPIO.setup (green, GPIO.OUT, initial-GPIO.LOW)

while 1:
        GPIO.output (red, GPIO.HIGH)
        sleep(2)

        GPIO.output(red, GPIO,LOW)
        GPIO.output(yellow, GPIO.HIGH)
        sleep(0,5)

        GPIO.output(yellow, GPIO.LOW)
        GPIO.output(green, GPIO HIGH)
        sleep(1)

        GPIO.output(green, GPIO LOW)
```