### **Assignment -3**

### **Python Programming**

Assignment Date	07 October 2022
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Maximum Marks	2 Marks

### Question:

Write a python code for blinking LED and Traffic lights for Raspberry Pi.

## **PROGRAM:**

```
import RPi.GPIO as GPIO
import time
import os
import signal
import sys
if('TRAFFIC LIGHT COUNTRY'inos.environ)and(os.environ['TRAFFIC LIGHT CO
UNTRY'] in ['UK', 'USA']):
     pattern = os.environ['TRAFFIC LIGHT COUNTRY'].lower()
else:
      print('TRAFFIC LIGHT COUNTRY should be set to UK or USA')
      sys.exit(1)
# Setup
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
# Turn off all lights when user ends demo
def allLightsOff(signal, frame):
      GPIO.output(9, False)
      GPIO.output(10, False)
      GPIO.output(11, False)
      GPIO.cleanup()
      sys.exit(0)
```

# signal.signal(signal.SIGINT, allLightsOff) # Loop forever while True: # Red GPIO.output(9, True) time.sleep(3) # Red and amber for UK only if (pattern == 'uk'): GPIO.output(10, True) time.sleep(1) # Green GPIO.output(9, False) GPIO.output(10, False) GPIO.output(11, True) time.sleep(5) # Amber, longer in US than UK GPIO.output(11, False)

GPIO.output(10, True)

time.sleep(2)

time.sleep(3)

GPIO.output(10, False)

# Amber off (red comes on at top of loop)

if (pattern == 'uk'):

else: