ASSIGNMENT – 3

PYTHON PROGRAMMING

Assignment Date	04 October 2022
Student Name	MANOJ KUMAR.J
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Maximum Marks	2 Marks

Question-1:

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

Solution:

```python
import RPi.GPIO as GPIO
import time

try:
  def lightTraffic(RED, GREEN, BLUE, delay ):
   GPIO.output(RED, 1)
   time.sleep(delay)
   GPIO.output(RED, 0)
   GPIO.output(GREEN, 1)
   time.sleep(delay)
   GPIO.output(GREEN, 0)
   GPIO.output(BLUE, 1)
   time.sleep(delay)
   GPIO.output(BLUE, 0)
  GPIO.setmode(GPIO.BCM)
  BUTTON = 19
  GPIO.setup(BUTTON, GPIO.IN, pull_up_down=GPIO.PUD_UP)
  BLUELED = 12
  GREENLED = 27
  REDLED = 14
  GPIO.setup(BLUELED, GPIO.OUT)
  GPIO.setup(GREENLED, GPIO.OUT)
  GPIO.setup(REDLED, GPIO.OUT)
  while True:
   input_state = GPIO.input(BUTTON)
   if input_state == False:
    print('WHEN BUTTON IS PRESSED')
    lightTraffic(BLUELED, GREENLED, REDLED, 1)
   else:
```

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```python
    GPIO.output(BLUELED, 0)
    GPIO.output(GREENLED, 0)
    GPIO.output(REDLED, 0)
except KeyboardInterrupt:
  print "Something Went Wrong"
finally:
  GPIO.cleanup()
```