Assignment -3

Python
Programming

Assignment Date	05 October 2022
Student Name	Ms.M.Nithyasri
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Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED for Raspberry pi.

Solution:

```
import RPi.GPIO as
GPIO from time
import sleep
GPIO.setmode(GPIO.
BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:
GPIO.output(8, GPIO.HIGH)
sleep(1)
GPIO.output(8, GPIO.LOW)
sleep(1)
```

Question-2:

Write python code for Traffic lights for Raspberry pi.

Solution:

```
import RPi.GPIO
as GPIOimport
time
import signal
import sys
```

```
GPIO.setmode(GPI
O.BCM)
GPIO.setup(9,
GPIO.OUT)
GPIO.setup(10,
GPIO.OUT)
GPIO.setup(11,
GPIO.OUT)

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)


while True:
  #  Red
  GPIO.output(9,
  True)
  time.sleep(3)

  # Red and amber
  GPIO.output(10,
  True)
  time.sleep(1)

  # Green
  GPIO.output(9,
  False)
  GPIO.output(10,
  False)
  GPIO.output(11,
  True)
  time.sleep(5)

  # Amber
  GPIO.output(11,
  False)
  GPIO.output(10,
  True)
  time.sleep(2)

  # Amber off (red comes on at top
  of loop)GPIO.output(10, False)
```