Assignment -3

Python Programming For Raspberry pi

Assignment Date	5 October 2022
Student Name	Ms. Keerthana dhananchezian
Student Roll Number	510119106005
Maximum Marks	2 Marks

Question-1:

Write a python code for blinking LED using Raspberry pi.

Solution:

```
import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BCM)
cnt = 0
MAIL_CHECK_FREQ = 1 #
change LED status every 1
seconds
RED_LED = 4
GPIO.setup(RED_LED,
GPIO.OUT)
while True:
 if (cnt == 0):
GPIO.output(RED_LED, False)
cnt = 1
else:
GPIO.output(RED_LED, True)
cnt = 0
time.sleep(MAIL_CHECK_FREQ)
GPIO.cleanup()
```

Question-2:

Write a python code for traffic light using raspberry pi.

Solution:

```
from gpiozero import Button, Trafficlight, 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()
```