ASSIGNMENT- 3

Team Member	S PARIVARMAN
Register Number	421819104015
Date	29-09-2022
Team ID	PNT2022TMID38983
Project Name	Smart Farmer- IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

QUESTION- 1:

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

Solution :

#LED BLINKING :

import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True: #infinite loop

GPIO.output(8, GPIO.HIGH) # Turn on

print("The LED is ON")

sleep(5) # Sleep for 5 second

GPIO.output(8, GPIO.LOW) # Turn off

print("The LED is OFF")

sleep(5) # Sleep for 5 second

#TRAFFIC LIGHT CODE :

from gpiozero import LED

from time import sleep

```python
red= LED(17) #pin numbers connected to Led's
amber=(22)
green=(27)

while True:
red.on() #RED light
print("Red light is ON")
for i in range(60,0,-1):
print("Remaining time: ",i)

sleep(1)
red.off()
amber.on() # AMBER light
print("Yellow light is ON")
for i in range(5,0,-1):
print("Remaining time: ",i)
sleep(1)
amber.off()
green.on #GREEN light
print("Green light is ON")
for i in range(40,0,-1):
print("Remaining time: ",i)
sleep(1)
green.off()
```