

Assignment-3

Question-1:

A) Write a python program to blink an LED in Raspberry Pi,

Python code

```
import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library
from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now
GPIO.setmode(GPIO.BOARD) # Use physical pin numbering
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial
value to low (off)

while True: # Run forever
    GPIO.output(8, GPIO.HIGH) # Turn on
    sleep(1) # Sleep for 1 second
    GPIO.output(8, GPIO.LOW) # Turn off
    sleep(1) # Sleep for 1 second
```

B) Write a python code for blinking Traffic lights for Raspberry Pi.

Python code:

```
from gpiozero import Button, TrafficLights
from time import sleep
button = Button(21)
lights = TrafficLights(25, 8, 7)
while True:
    button.wait_for_press()
    light.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
```