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Project Design Phase-I
Proposed Solution Template

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Date	5 October 2022
Student Name	Ms.M.Jeyapriya
Student Roll Number	913119106040
Maximum Marks	2 Marks

Question-1:

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

Code for blinking LED:

```
L ED_PIN=17


import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BCM)

GPIO.setup(LED_PIN,GPIO.OUT)

try:

    while True:

        GPIO.output(LED_PIN,GPIO.HIGH)

        time.sleep(1)

        GPIO.output(LED_PIN,GPIO.LOW)

        time.sleep(1)

    except KeyaboardInterrupt:

        GPIO.cleanup()
```

Code for Traffic lights:

```
IS_REGULAR = True

def regular():

    while True:

        if not GPIO.input(channel) and not IS_REGULAR:
```

```python
    for col in [red, yel, gre]:
        col.on()
        sleep(2)
        col.off()
        if not IS_REGULAR: break


def callback(channel):
    global IS_REGULAR
    IS_REGULAR = False

    print('Emergency vehicle detected')
    red.off()
    yel.off()
    gre.on()
    sleep(5)
    gre.off()
```