

Assignment-3

Python Programming

Assignment Date	06 October 2022
Student Name	SUBHAA SHAKTHI R
Student Roll Number	811519106150
Maximum Marks	2 Marks

Question-1:

Write a python code for led blinking in raspberry pi

SOLUTION:

```
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
    onsleep(1) # Sleep for 1 second
    GPIO.output(8, GPIO.LOW) # Turn
    offsleep(1) # Sleep for 1 second
```

Question-2:

Write a python code for traffic light in raspberry pi

SOLUTION:

```
from gpiozero import Button, TrafficLights,  
Buzzerfrom time import sleep
```

```
buzzer = Buzzer(20)
```

```
button = Button(30)
```

```
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()
```