

Assignment -3

Python Programming for Raspberrypi

Assignment Date	11 October 2022
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Maximum Marks	2 Marks

Question-1:

Write a python code for blinking LED using 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 on  
    sleep(1) # Sleep for 1 second  
    GPIO.output(8, GPIO.LOW) # Turn off  
    sleep(1) # Sleep for 1 second
```

Question-2:

Write a python code for Traffic Lights using Raspberry pi.

Solution:

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

