

Assignment -3
Python Programming

Assignment Date	29 September 2022
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Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi (Only python code is enough,no need to execute in raspberry pi).

Solution:-

Python Code for Blinking LED:

```
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
```

Python code for Traffic Lights:

```
from gpiozero import LED
```

```
from time import sleep
```

```
red = LED(22)
```

```
amber = LED(27)
```

```
green = LED(17)
```

```
while True:
```

```
    red.on()
```

```
    sleep(1)
```

```
    amber.on()
```

```
    sleep(1)
```

```
    green.on()
```

```
    sleep(1)
```

```
    red.off()
```

```
    sleep(1)
```

```
    amber.off()
```

```
    sleep(1)
```

```
    green.off()
```