

Assignment - 3

Python code for blinking LED and Traffic lights for Raspberry pi

Assignment Date	14 October 2022
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Maximum Marks	2 Marks

Question-1:

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

Solution:

1. Implementation Code - Blinking a LED:

```
import RPi.GPIO as GPIO
from time import sleep
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(9, GPIO.OUT, initial=GPIO.LOW)
while True:
    GPIO.output(9, GPIO.HIGH)
    sleep(1)
    GPIO.output(9, GPIO.LOW)
    sleep(1)
```

2. Implementation Code - Traffic Light:

```
import RPi.GPIO as GPIO
from time import sleep
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(7, GPIO.OUT, initial=GPIO.LOW)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
GPIO.setup(9, GPIO.OUT, initial=GPIO.LOW)
```

```
GPIO.setup(10, GPIO.OUT, initial=GPIO.LOW)
```

```
while True:
```

```
    GPIO.output(7, GPIO.HIGH)
```

```
    sleep(10)
```

```
    GPIO.output(7, GPIO.LOW)
```

```
    GPIO.output(8, GPIO.HIGH)
```

```
    sleep(10)
```

```
    GPIO.output(8, GPIO.LOW)
```

```
    GPIO.output(9, GPIO.HIGH)
```

```
    sleep(10)
```

```
    GPIO.output(9, GPIO.LOW)
```

```
    GPIO.output(10, GPIO.HIGH)
```

```
    sleep(10)
```

```
    GPIO.output(10, GPIO.LOW)
```