

ASSIGNMENT-3
PYTHON CODE FOR RASPBERRY PI

Assignment Date	06 October 2022
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Student Roll Number	201924
Maximum Marks	2 Marks

QUESTION:

Build a python code for blinking of LEDs and Traffic lights for Raspberry Pi.

SOLUTION:

BLINKING OF LEDs:

#BLINKING OF LED

```
import RPi.GPIO as GPIO
```

```
import time
```

```
LED_PIN = 17
```

```
GPIO.setmode(GPIO.BCM)
```

```
GPIO.setup(LED_PIN, GPIO.OUT)
```

```
while True:
```

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

```
    time.sleep(1)
```

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

```
    time.sleep(1)
```

```
GPIO.cleanup()
```

TRAFFIC LIGHTS:

```
#TRAFFIC LIGHTS
```

```
import RPi.GPIO as GPIO
```

```
import time
```

```
GPIO.setmode(GPIO.BOARD)
```

```
Red=7
```

```
Yellow=11
```

```
Green=13
```

```
GPIO.setup(Red, GPIO.OUT)
```

```
GPIO.setup(Yellow, GPIO.OUT)
```

```
GPIO.setup(Green, GPIO.OUT)
```

```
while True:
```

```
    GPIO.output(Red, True)
```

```
    time.sleep(3)
```

```
    GPIO.output(Red, False)
```

```
    GPIO.output(Yellow, True)
```

```
    time.sleep(1)
```

```
    GPIO.output(Yellow, False)
```

```
    GPIO.output(Green, True)
```

```
    time.sleep(3)
```

```
    GPIO.output(Green, False)
```

```
GPIO.cleanup()
```