

Assignment -3
Python Code for Blinking led & Traffic lights

Assignment Date	7 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

#BLINKING LED

```
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setup(18, GPIO.OUT)
while True:
    GPIO.output(18,True) # Turn on Led
    time.sleep(1)
    GPIO.output(18,False) # Turn off Led
    time.sleep(1)
```

#TRAFFIC LIGHTS

```
import RPi.GPIO as GPIO
import time import signal
import sys
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
def allLightsOff(signal, frame):
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, False)
    GPIO.cleanup()
    sys.exit(0)

signal.signal(signal.SIGINT, allLightsOff)
while True:
    # Red
    GPIO.output(9, True)
    time.sleep(3)
```

```
# Red and amber
GPIO.output(10, True)
time.sleep(1)
```

```
# Green
GPIO.output(9, False)
GPIO.output(10, False)
GPIO.output(11, True)
time.sleep(5)
```

```
# Amber
GPIO.output(11, False)    GPIO.output(10, True)
time.sleep(2)
```

```
# Amber off (red comes on at top of loop)
GPIO.output(10, False)
```