

Assignment -3
Python Code for Blinking led &
Traffic lights

Assignment Date	7 OCTOBER 2022
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Maximum 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 Ledtime.sleep(1)
    GPIO.output(18,False) # Turn
    off Ledtime.sleep(1)
```

#TRAFFIC LIGHTS

```
import RPi.GPIO as
GPIOimport 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
p(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)
```