

KSR COLLEGE OF ENGINEERING,TIRUCHENGOD

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IOT ASSIGNMENT-1

#python code for blinking LED and traffic lights for Raspberry pi #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 Light

```
import RPi.GPIO as
GPIO import time
import signal import
sys

# Setup

GPIO.setmode(GPIO.BCM)
```

```
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
# Turn off all lights when user ends demo
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) # Loop forever 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)
```