

ASSIGNMENT – 3

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Maximum Mark	2 Marks

Questions-1

How to blink led using raspberry pi?

Solution:

```
import RPi.GPIO as GPIO
import time

ledPin = 22

def setup():
    GPIO.setmode(GPIO.BOARD)
    GPIO.setup(ledPin, GPIO.OUT)
    GPIO.output(ledPin, GPIO.LOW)

def loop():
    while True:
```

```

        print 'LED on'
        GPIO.output(ledPin, GPIO.HIGH)
        time.sleep(1.0)
        print 'LED off'
        GPIO.output(ledPin, GPIO.LOW)
        time.sleep(1.0)
def endprogram():

    GPIO.output(ledPin, GPIO.LOW)
    GPIO.cleanup()

if __name__ == '__main__':
    setup()
    try:
        loop()
    except KeyboardInterrupt:
        endprogram()

```

Question-2

How to blink traffic light using raspberry pi?

Solution:

```
from gpiozero import Button, TrafficLights, Buzzer
```

```
from time import sleep
```

```
buzzer = Buzzer(15)
```

```
button = Button(21)
```

```
lights = TrafficLights(25, 8, 7)
```

```
while True:
```

```
button.wait_for_press()
```

```
buzzer.on()
```

```
light.green.on()
```

```
sleep(1)
```

```
lights.amber.on()
```

```
sleep(1)
```

```
lights.red.on()
```

```
sleep(1)
```

```
lights.off()
```

```
buzzer.off()
```