

## NALAIYA THIRAN

### ASSIGNMENT-3

**USER CASE: PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF RELIANT**

**BY TEAM MEMBER 3: KAMAL RAJ.R**

**Write a python code for Blinking LED and Traffic light for Raspberry pi**

#### **CODE FOR BLINKING LED:**

```
import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:

    GPIO.output(8, GPIO.HIGH)

    sleep(1)

    GPIO.output(8, GPIO.LOW)

    sleep(1)
```

#### **CODE FOR TRAFFIC LIGHT:**

```
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:
```

```
    GPIO.output(9, True)
```

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

```
    GPIO.output(10, True)
```

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

```
    GPIO.output(9, False)
```

```
    GPIO.output(10, False)
```

```
    GPIO.output(11, True)
```

```
    time.sleep(5)
```

```
    GPIO.output(11, False)
```

```
    GPIO.output(10, True)
```

```
    time.sleep(2)
```

```
    GPIO.output(10, False)
```