

Assignment -3

Date	30 September 2022
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Project Name	PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF RELIANT USING IoT TECHNOLOGY
Maximum Marks	2 Marks

Question-1

Write Python code for blinking LED and traffic lights for Raspberry Pi.

Solution:

1. Python code for Blinking LED Using Raspberry pi

```
from gpiozero import LED # importing GPIO pins as LED
from time import sleep   # importing time function as sleep

led = LED(16)            # LED is connected to GPIO 16

while True:              # infinite loop

    led.on()              # LED is on for 1 second

    sleep(1)

    led.off()             # LED is off for 1 second

    sleep(1)
```

2. Python code for Blinking Traffic Lights Using Raspberry pi

```
from gpiozero import LED                                # importing GPIO pins as LED
from time import sleep                                  # importing time function as sleep
red = LED(22)                                           # red LED connected to GPIO 22
yellow = LED(09)                                        # yellow LED connected to GPIO 09
green = LED(17)                                         # green LED connected to GPIO 17

while True:                                             # infine loop
    red.on()                                             # red LED is on for 5 seconds to make stop
    sleep(5)
    red.off()

    yellow.on()                                         # yellow LED is on for 2 seconds to make ready
    sleep(2)
    yellow.off()

    green.on()                                          # green LED is on for 5 seconds to make go
    sleep(5)
    green.off()
```