

Assignment – 3

Raspberry pi programming

Date	04 October 2022
Student name	R. NAVEEN KUMAR
Student register no	212619106003
Maximum Marks	2 Marks

Question-1

Write python code for blinking LED and traffic lights for Raspberry pi.

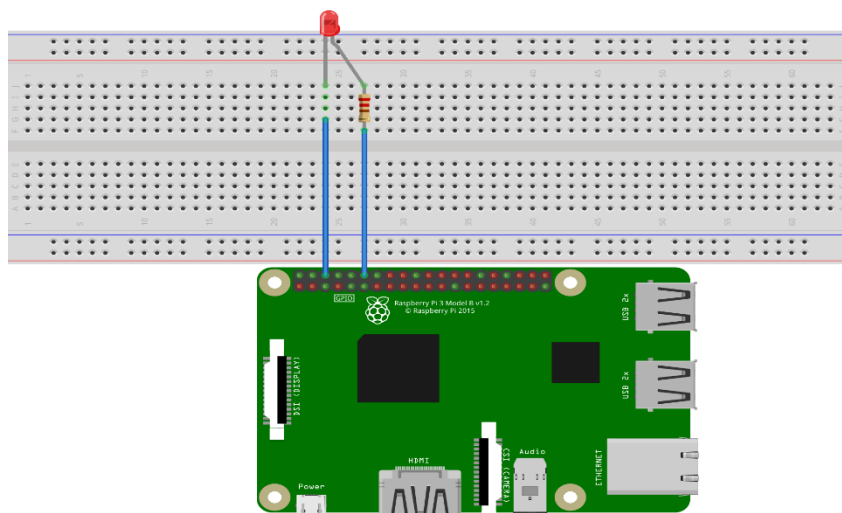
Solution

1. Python code LED blinking for raspberry pi:

```
from gpiozero import LED          # importing GPIO pins as LED
from time import sleep            # importing time function as sleep
red = LED(18)                     # red LED is connected to GPIO 18

while True:                       # infinite loop
    red.on()                       # red LED is on for 1 second
    sleep(1)
    red.off()                     # red led is off for 1 second
    sleep(1)
```

Circuit : LED blinking using raspberry pi



2. Python code traffic light for raspberry pi:

```
from gpiozero import LED
from time import sleep

red = LED(23)
yellow = LED(07)
green = LED(19)

while True:

    red.on()
    sleep(5)
    red.off()

    yellow.on()
    sleep(2)
    yellow.off

    green.on()
    sleep(5)
    green.off()
```

importing GPIO pins as LED

importing time function as sleep

red LED connected to GPIO 23

yellow LED connected to GPIO 07

green LED connected to GPIO 19

infinite loop

red LED is on for 5 seconds to make stop

yellow LED is on for 2 seconds to make ready

green LED is on for 5 seconds to make go

Circuit : Traffic light using raspberry pi

