Assignment – 3

Raspberry pi programming

Date	04 October 2022
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Maximum Marks	2 Marks

Question-1

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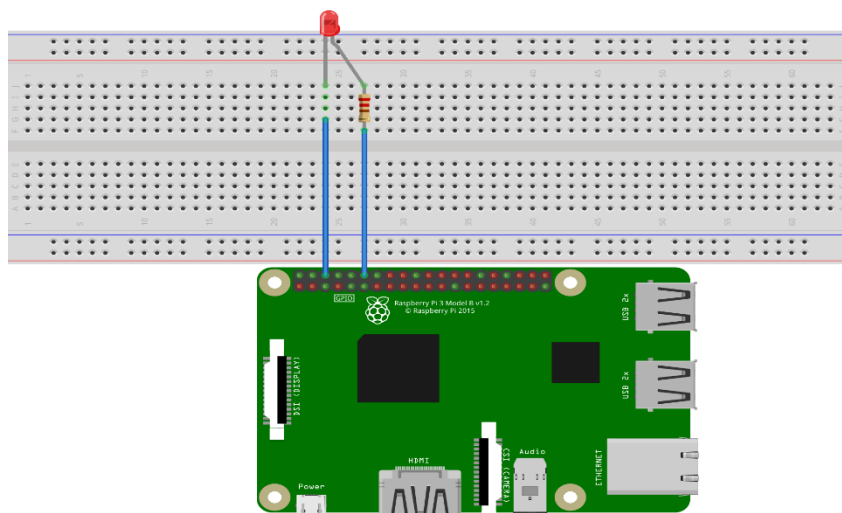
Solution

1. Python code LED blinking for raspberry pi:

```python
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

fritzing

2.Python code traffic light for raspberry pi:

```python
from gpiozero import LED          # importing GPIO pins as LED
from time import sleep           # importing time function as sleep
red = LED(23)                    # red LED connected to GPIO 23
yellow = LED(07)                 # yellow LED connected to  GPIO 07
green = LED(19)                  # green LED connected to GPIO 19


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()
```

Circuit : Traffic light using raspberry pi