

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

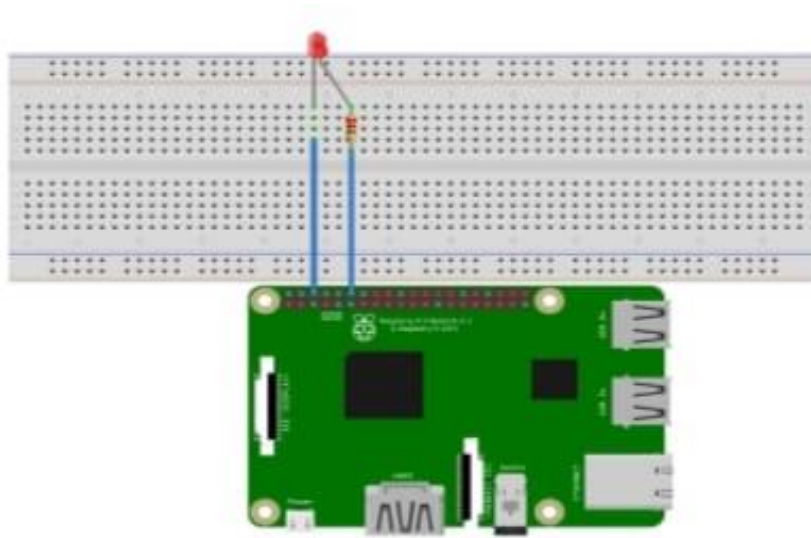
1. Python code LED blinking for raspberry pi:

```
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 1second
    sleep(1)
```

Circuit : LED blinking using raspberry pi



2. Python code traffic light for raspberry pi:

```
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:                   #infinite 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

