Program to calculate the Round Trip Time (RTT)

Difficulty Level : Medium • Last Updated : 29 May, 2017

Round trip time(RTT) is the length of time it takes for a signal to be sent plus the length of time it takes for an acknowledgement of that signal to be received. This time therefore consists of the propagation times between the two point of signal.
On the Internet, an end user can determine the RTT to and from an IP(Internet Protocol) address by pinging that address. The result depends on various factors :-

- The data rate transfer of the source's internet connection.
- The nature of transmission medium.
- The physical distance between source and destination.
- The number of nodes between source and destination.
- The amount of traffic on the LAN(Local Area Network) to which end user is connected.
- The number of other requests being handled by intermediate nodes and the remote server.
- The speed with which intermediate node and the remote server function.
- The presence of Interference in the circuit.

Examples:

```
Input : www.geeksforgeeks.org
Output : Time in seconds : 0.212174892426

Input : www.cricbuzz.com
Output : Time in seconds : 0.55425786972
```

Related Articles Save for later

```python
# Python program to calculate RTT

import time
import requests

# Function to calculate the RTT
def RTT(url):

    # time when the signal is sent
    t1 = time.time()

    r = requests.get(url)

    # time when acknowledgement of signal
    # is received
    t2 = time.time()

    # total time taken
    tim = str(t2-t1)

    print("Time in seconds :" + tim)

# driver program
```

```
# url address
url = "http://www.google.com"
RTT(url)
```

Output:

```
Time in seconds :0.0579478740692
```

This article is contributed by **Pramod Kumar**. If you like GeeksforGeeks and would like to contribute, you can also write an article using contribute.geeksforgeeks.org or mail your article to contribute@geeksforgeeks.org. See your article appearing on the GeeksforGeeks main page and help other Geeks.

Please write comments if you find anything incorrect, or you want to share more information about the topic discussed above.

Attention geek! Strengthen your foundations with the **Python Programming Foundation** Course and learn the basics.

To begin with, your interview preparations Enhance your Data Structures concepts with the **Python DS** Course. And to begin with your Machine Learning Journey, join the Machine Learning – Basic Level Course

Previous

Program to remotely Power On a PC over the internet using the Wake-on-LAN protocol.

Next

Introduction of MAC Address in Computer Network

RECOMMENDED ARTICLES

Page : 1 2 3

01 **Difference between Round trip time (RTT) and Time to live (TTL)**
01, May 21

02 **What is RTT(Round Trip Time)?**
06, May 20

03 **Python program to calculate acceleration, final velocity, initial velocity and time**
28, Dec 20

04 **Python program to find difference between current time and given time**
20, Jan 20

05 **round() function in Python**
25, Nov 17

06 **Python | Pandas dataframe.round()**
22, Nov 18

07 **Python | Pandas Series.round()**
26, Oct 18

08 **Python | Pandas DatetimeIndex.round()**
24, Dec 18

Article Contributed By :

GeeksforGeeks

Vote for difficulty

Current difficulty : Medium

Easy | Normal | Medium | Hard | Expert

Article Tags : Computer Networks, Python

Practice Tags : Computer Networks

Improve Article | Report Issue

Writing code in comment? Please use ide.geeksforgeeks.org, generate link and share the link here.

Load Comments

GeeksforGeeks

5th Floor, A-118,
Sector-136, Noida, Uttar Pradesh - 201305

feedback@geeksforgeeks.org