Documentation

Write a java function that will ping any host (given as input) and computes the median of the time taken to ping.

Use the system ping utility, do not use any deprecated methods

Class AssignmentThree
This program accepts a hostname from the user and attempts to check whether it is reachable within a given timeout period of one second. If the hostname is reachable, it records the time taken to reach the hostname (i.e., the difference between the final time and the initial time) into an ArrayList. This process continues for 10 iterations. After completing the iterations, the program calculates and prints the median of the recorded ping times.

Method-calculateMedianPing

Parameters - (String address)
This function takes an address input and checks whether the address can be reached by in the given timeout period . If it is reachable then it stores the ping time by taking the differences between initial time and final time This process is continued for 10 loops in order to calculate the average
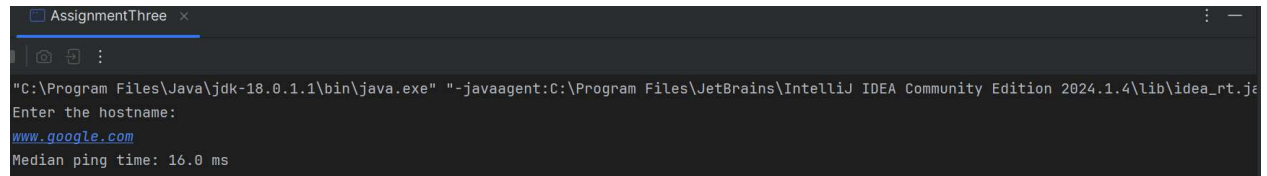
**Method-
calculateMedian
Parameters - ArrayList<Long> values**
This function takes arraylist as input which stores all the ping time values for the iterates now this calculate the median ping time from this values if the no of iterations is even then it is simply middle element otherwise it becomes average of 2 elements

**Method-main(String argos[])
-This is a entry point where it takes hostname from user and then makes call to calculateMedianPing() method and that method calculates the ping time**

Output-


```
"C:\Program Files\Java\jdk-18.0.1.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.1.4\lib\idea_rt.ja
Enter the hostname:
www.google.com
Median ping time: 16.0 ms
```