

CS 553 Cloud Computing
Programming Assignment 1
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Manual

1) CPU Benchmarking:-

Below are the steps to execute the program.

- 1) gcc -pthread -o term cpuPerformance.c
- 2) execute term file using below command
./term

When you execute the above file you will get below menu.

Perform CPU Benchmarking on

1. 1 Thread
2. 2 Thread
3. 4 Thread : 1

- 3) Select your choice by entering options.

2) Disk Benchmarking:-

- 1) Below are the steps to execute the program.

- a. Javac Disk.java
- b. Java Disk

- 2) User will be asked to enter number of threads to create and size of data (in MB) to write and read from file in MB.

- 3) This will execute the random read, Random write , Sequential write and sequential read operation one after another and will display throughput and latency.

3) Network Benchmarking:-

- 1) Open Server_list.txt file and add the host ip address and port separated by pipe (|) without any extra space in between.

For example 192.168.2.153|25003

Here 192.168.2.153 is host ip address and 25003 is port number.

- 2) Open the server and separate terminals or on separate machines and execute the below commands to perform TCP and UDP packet transfer operations.

3) TCP packet transfer

- Server

- i. Javac Network_Server_TCP.java
- ii. Java Network_Server_TCP

- Client

- i. Javac Network_Client_TCP.java
- ii. Java Network_Client_TCP

4) UDP packet transfer

- Server
 - iii. Javac Network_Server_UDP.java
 - iv. Java Network_Server_UDP
- Client
 - v. Javac Network_Client_UDP.java
 - vi. Java Network_Client_UDP

5) For both UDP and TCP network operations user will be asked to enter number of threads to create and size of data (in MB) to transfer.