

USER MANUAL

CPU Benchmark

There are 4 files in CPU folder.

CPUGflops.java: Floating point operations
 CPUGiops.java: Integer point operations
 Cpu10minflops.java: 10 min for GFLOPS
 Cpu10miniops.java: 10 min for GIOPS

Instructions:

• Go to the path of the file.

Filename	CPUGflops	CPUGiops	Cpu10minflops	Cpu10miniops
Compilation	javac	javac	javac	javac
	CPUGflops.java	CPUGiops.java	Cpu10minflops.java	Cpu10miniops.java
Running	java CPUGflops	java CPUGiops	Java	java Cpu10miniops
			Cpu10minflops	

Sample Output:

Enter the choice from the list as shown below.

```
1.Using Single thread
2.Using two threads
3.Using four threads
Enter your choice:
1
-----For 1 Thread-----
Total Time :1.101
GFLOPS :11.702908158038149
```

```
1.Using Single thread
2.Using two threads
3.Using four threads
Enter your choice:
3
-----For 4 Threads-----
Total Time :2.38325
GIOPS :5.4065398446987345
```

Disk Benchmark

There are 3 files in this folder:

DiskByte.java: For 1 Byte
DiskKB.java: For 1 Kilo Byte
DiskMB.java: For 1 Mega Byte

Instructions:

File Name	DiskByte.java	DiskKB.java	DiskMB.java
Compilation	javac DiskByte.java	javac DiskKB.java	javac DiskMB.java
Running	java DiskByte	java DiskKB	java DiskMB

Sample Output:

Enter the file name for sequential and random access and select your option. The files entered will be stored in the same path as of the file.

```
Enter the filename for Sequential Access:
abc
Enter the filename for Random Access:
def
----OPTIONS-----
1.Using Single thread
2.Using two threads
3.Using four threads
Enter your choice:
-----For 1 Thread------
-----
Sequential Access Write Time: 4.56734E-4
Latency for Sequential Access Write Time :4.46029296875E-4 ms
Throughput for Sequential Access Write Time :2189.458196674651 MB/sec
Sequential Access Read Time: 0.009211657
Latency for Sequential Access Read Time :0.0089957587890625 ms
Throughput for Sequential Access Read Time :108.55810197882965 MB/sec
Random Access Write Time: 0.020818857
Latency for Random Access Write Time :0.0203309150390625 ms
Throughput for Random Access Write Time :0.04690759439867424 MB/sec
Random Access Read Time: 0.010083044
Latency for Random Access Read Time :0.00984672265625 ms
Throughput for Random Access Read Time :0.09685195264445935 MB/sec
```

Network Benchmark

This folder consists of 12 files:

TCP

ctcp.java : Client 1 byte
 stcp.java : Server 1 byte
 ctcpkb : client 1 kilo byte
 stcpkb : server 1 kilo byte
 ctcp64kb : client 64 kilobyte
 stcp64kb : server 64 kilobyte

UDP

cudp.java : Client 1 byte
 sudp.java : Server 1 byte
 cudpkb : client 1 kilo byte
 sudpkb : server 1 kilo byte
 cudp64kb : client 64 kilobyte
 sudp64kb : server 64 kilobyte

Instructions:

- You need to write the client in one instance and server in another instance.
- You need to enter the "IP Address of the server" in each of the client program before running.

For TCP:

Socket socket=new Socket("52.36.11.80",port++);

For UDP:

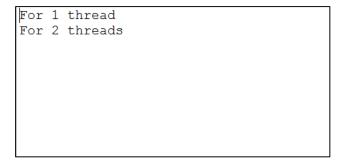
InetAddress host=InetAddress getbyName("52.36.11.89");

- Compilation: javac filename.java (on both client and server side)
- Running: java filename (on server side first and then on client side)

Sample Output:

TCP

Server Side :



Client Side:

```
For 1 thread
MESSAGE SENT: OK
Write Time:19914626
For 2 threads
MESSAGE SENT: OK
MESSAGE SENT: OK
Write Time:1334279
```

UDP

Server Side:

```
For 1 thread
For 2 threads
Server socket created. Waiting for incoming data...
Server socket created. Waiting for incoming data...
Server socket created. Waiting for incoming data...
```

Client Side:

For 1 thread
MESSAGE SENT : OK
Write Time:16501952
For 2 threads
MESSAGE SENT : OK

MESSAGE SENT : OK Write Time:1021237