User Manual

User Manual for Benchmarking

CPU

- Usage: ./cpu total_operation statistical_mode

The program takes following command line arguments:

- Total operation: Number of time Integer or floating point operation are carried out. For ex. 40000000
- Statistical Mode: This is to command that whether code will create statistical data or not. If provided 1 then it will create statistical data, if 0 is provided then it will do normal benchmarking.

Example:

```
./cpu 40000000 0
```

Notes:

- Keep the value of total_operation large, so that program run for few seconds.

Memory

- Usage: ./memory loop_time

The program takes following command line arguments:

- Loop time: It multiplies the operating time. Provide 1 for normal operations. In case the duration of program is less then increase this parameter.

Example:

```
./memory 10
```

Notes:

- Test for various value of Loop time. Typically value in between 10-15 will suffice our purpose

Disk

- Usage: ./disk loop_time

The program takes following command line arguments:

- Loop time: It multiplies the operating time. Provide 1 for normal operations. In case the duration of program is less then increase this parameter.

Example:

```
./disk 10
```

Notes:

- Test for various value of Loop time. Typically value in between 10-15 will suffice our purpose.

Network

It has two parts. One is server and client. Let us see each of them.

Server

- Usage: ./server port thread_count

It takes following command line argument:

- Port_no: It is the port on which server will run.
- Thread_count: It is the number of thread to be opened

Example:

./server 12345 1

./server 12345 2

./server 12345 4

./server 12345 8

Notes:

- The value of port number should be valid port which are not for reserved purpose.

Client

- Usage: ./client ip port thread_count

It takes following command line argument:

- ip: The ip address on which server is running.
- Port No: Port on which server is listening
- Thread Count: Number of thread server has created

Example:

./client 127.0.0.1 12345 1

./client 127.0.0.1 12345 2

./client 127.0.0.1 12345 4

./client 127.0.0.1 12345 8

Notes:

- Port number should be same as that of server.
- Thread count should be same as that of server.
- Client should be run after starting the server