

Department of Computer Science & Engineering

# Problem Solving with C Laboratory-UE20CS152

Apr-Aug, 2021

# Mini - Project Synopsis

Date:12/06/2021

TITLE: Perf-Tools

Objectives:

Quantifying CPU and Memory performance by various tests.Such a tool that combines tests from various stand points can come in handy for CPU designers , kernel/os developers and even the common user to be able to compare hardware to make a wise purchase!

Description in points:

Some of the test’s we aim to achieve :

* floating point integers calculation [Avoiding caching , and pipeline advantages].
* memory block size latency [Combining Intelⓡ’s MLC test along with generic tests].

intel’s mlc test : [here](https://software.intel.com/content/www/us/en/develop/articles/intelr-memory-latency-checker.html/)

General aim’s:

* All polled data to be plotted so as to even cater to the needs of research papers and spec sheets.
* to get key points from graphed data.
* A global scoreboard implmented using remote db such as remote mongodb , this is so that we can collect all tested data , this would also require us to find the sysinfo.
* To make the program entirely scriptable.
* A standardised compile time test.[NOT fixated yet on].
* GUI [NOT Fixated yet].

Current Status of Implementation:

* floating point integers calculation [Avoiding caching , and pipeline advantages].

STATUS : FINISHED

* To make the program entirely scriptable.

STAUS : FINISHED FOR IMPLEMENTED MODULES

* memory block size latency

**STATUS : WORK IN PROGRESS**

* Plotting data

**STATUS : NOT STARTED**

* DB and Global scoreboard/ranking system

STATUS : NOT STARTED

Last two points in the description will be decided on the time available.

Team Details:

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| **#** | **Name** | **SRN** | **Signature of Student** | **Remarks by Faculty** |
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