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

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:

#	Name	SRN	Signature of Student	Remarks by Faculty
	P K Navin Shrinivas	PES2UG20CS237		
	Praneeth Kumar L	PES2UG20CS251		
	Rahul Samal	PES2UG20CS262		