

# Live Lecture Chat Window

## Monday, April 4, 2022

**14:54:11 From danielyu to Everyone:** For the two table and graphs, the table is just the data we output in the .csv file (I believe)? Do we have to submit these tables to the pdf report as well?

The table is the rectangular-shaped collection of numbers in the spreadsheet. See the Project Notes for an example. Typically what comes out of your program runs is a linear list of numbers. You can either copy and paste them into the rectangular table or you can use Pivot Tables. See the Pivot Tables notes.

**14:58:00 From Jacque L to Everyone:** Are the random variables, tx, txv, ty, sv, theta a uniform distribution?

As uniform as the random number generator can make them.

**14:58:57 From Elizabeth to Everyone:** could you explain the DEBUG variable and its use?

I like to scatter debugging print statements around in my program but then totally remove them when I want to run timing numbers. I don't even want a leftover if-statement in there to distort the timing. I found that if I say:

```
if( false ) fprintf( ... );
```

then the compiler will *completely* eliminate the print statement from the assembly code.

**15:00:09 From Andrew Layendecker to Everyone:** Is the STHMIN, and STHMAX meant to represent the min/max in the Theta row in the handout table?

Yes.

**15:02:32 From Myers, Coder to Everyone:** I get a compile error passing stderr in as a shared variable in the #pragma line

If you don't print to stderr (like I like to do), then you don't need to include stderr in the shared( ) list.

**15:10:14 From Jacque L to Everyone:** Clock speed is not a good indicator for CPU speed, right?

It's a "proportional indicator" in that if you could double the clock speed, you would likely double performance. But it is difficult to convert clock speed into some of our more meaningful units like "megamultiplies per second".

**15:21:08 From Chantharamalee, Atiwitch to Everyone:** Is it possible to have more than 2 states per physical core?

Yes, but if the number of threads on a core exceeds the number of states able to be held in the core, then the extra states will be swapped out to, and in from, memory which is very time consuming.

**15:33:33 From Aseem Saxena to Everyone: Regarding project 1. I have put the code you provided in Visual Studio and added the constant values from your website; however, I get errors for things like inline and the loops ie for statements etc. Is this supposed to occur? Do I need to add some library. I am not well versed in C programming. Thanks again**

Those are simple C++-isms. If you rename your file to be something.cpp instead of something.c and create the VS solution from that, they should go away. Or convert them back to C-isms. I can help you do that if you want to.

At this point, my laptop began to die and would have brought Zoom down with it. Rather than waste everyone's time, I announced that LL was over for today and that I will pickup on Slide #6 of the OpenMP notes on Wednesday's LL. Sorry for this.