Matrix Multiply Report

**Instructions on how to run the program:**

Run the program as ‘python3 filename’ and the program will tell you what to input.

**Problems and Bugs:**

I ran into a couple problems, the main being my own time management. I’m turning this in incomplete because I’ve poorly balanced my time across the projects that I have due these couple days.

As for bugs, I had 2 main bugs that stopped me from completing the assignment. The first was implementing the blocked function in the serial program. It seems as though it would only work on matrices of size 1024 and would call an error when trying to print the product.

The main bug I failed to fix was in the parallel program. I spent a lot of time trying to figure out what I was doing wrong with the shared list because the shared matrix would not be updated after the statement that multiplies the 2 matrices and puts the result inside the shared matrix (the product matrix would be filled with 0’s). I found somewhere online that had the same problem and a developer of pymp replied saying you can’t access a shared list as a 2d list but I found this too late and I didn’t give myself enough time to figure out how to work around this problem. I left the print statements I used to see what’s inside the matrices in the code as a comment so you could uncomment them and see what I was seeing.

**Time spent on the assignment:**

I spent about 3 hours trying to parallelize the matrix multiply. Most of this time was spent looking at the pymp documentation to figure out how the parallelization works because of the bug I was trying to fix.

**Output from the cpuInfo.sh program**

model name : Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz

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