

Parallelisation Strategy:

With given 'n' number of threads, there could have been two prominent parallelisation strategies:

- 1) Initialise 4 threads and execute 4 loops by dividing total number of transactions between these threads.
- 2) Initialise 10 mil threads, i.e. one for each transaction and execute 4 transaction in each iteration of a loop that runs 2.5 mil times.

I chose the first strategy, the primary reason being that in the 2nd case, the overhead of initialising threads is too much and it dilutes the very reason of doing this job by using threads. If we initialise these many threads, the initialisation itself take a lot more time than a non-threading approach for 10 mil transactions.

Hence, I went ahead with first strategy.

HOW TO RUN(in linux):

On linux terminal, change the current working directory to the SBI directory.

Then, type the following commands:

- 1) `javac main1.java`
- 2) `java main1`

Note: Graphs have been made by using matplotlib in python, can be found in graphs.pdf, find the code in drawGraphs.py.

Abhineet

17csb1062