

Part A

Steps

1. Run the code directly and see the output

The required result is obtained after directly running the file, it is evident from the results that parallelization helps with running the program at a lower time, in fact, it reduces the time by a huge factor in running the code using parallelization.

```
for 1 terms without threads : 180084 ns
for 1 terms with threads : 20083 ns

for 10 terms without threads : 16958 ns
for 10 terms with threads : 6360334 ns

for 100 terms without threads : 419416 ns
for 100 terms with threads : 548223583 ns

for 1000 terms without threads : 7970959 ns
```

We can see the output in the above screenshot.

For the 1000 terms with threads, it takes a lot of time to get printed. But it does if you leave it running for sometime.