CME 213 Homework 2

P1.1

Text

Description automatically generated with low confidence

We see that parallelizing the operation resulted in a 3 times faster run time

P2.1-2.5

Text

Description automatically generated with medium confidence

P2.6

We can see from the following table that 8 threads and 8 blocks give us optimal timing of 0.015 seconds. There’s no significant improvement as we increase beyond 8 threads, but performance did decrease significantly if we goes below 8 threads.

Similarly, lower blocks below 8 significantly increases performance time, while increasing beyond 8 will increase performance time(not as significantly).

Table

Description automatically generated

submission

Graphical user interface, text, application

Description automatically generated