1) Primes/semi-prime exhaustive search expanded to 64-bit semi-primes. I'll be continuing off of the sequential code that we made for assignment 2 and expanding to larger primes/semi-primes.
Verification will be a bit of a process. There is a 3rd party site that I've used for many cyber security problems here: https://www.dcode.fr/primality-test, but it is in fact a 3rd party site, so this will probably be run in tandem with my findings. I can test my primes and try to run multiple numbers between them to see if I can find any gaps in either the site's results or my own.

2) Hybrid OpenMP and MPI integration

3) Prime numbers and factorization

4) ECC-Linux/cscigpu

5) Expecting at least 27% speedup. My results from assignment 2 already had 1.275x speedup with Openmp.

6) I like exhaustive benchmarking and cyber security, so this caught my eye and I figured I would just run with it.

7) Divide and conquer design. A consistent pain point in this class has been resyncing values properly. Memory will possibly be an issue as noted in office hours