EEL 5764 Computer Architecture
Fall 2019
Homework 2

Due Date: Oct 08, 4 am ET through Canvas

Note: While discussions in the general topic area are permitted, your submission must be your work.

1. (30 pts) You are designing a PMD that is optimized for low power. Qualitatively explain the impact on cache hierarchy (L2 and memory) power and overall application energy if you design an L2 cache with:
   a. Small block size
   b. Small cache size
   c. High associativity

2. (40 pts) Complete the following exercises of Appendix B of the referred textbook (Computer Architecture: A Quantitative Approach--6th Edition) – B.13.

3. (30 pts) Complete the following exercises of Appendix A of the referred textbook (Computer Architecture: A Quantitative Approach--6th Edition) – A.1.