Your writeup should make clear how your work relates to the material covered in class. Specifically, your selected variants and writeup should use and relate to SIMD parallelization, blocking/striding for caches, low level optimizations, and specilization to cor- ner cases. The writeup should be a well written document that includes, performances plots for each variant and the following sections for each of the three operations:

Overview For each operation answer the following questions: What is the problem you are trying to solve? What are the pain points in this problem? How do you plan to solve this? And how does this relate back to the material covered in class.

Refinements For each variant of each operations answer the following questions: What did you change between each variant? What should we expect to see in the results and why? Include performance plots, what do the results show? What interesting features should we note in the plot? What would you do to improve these result?