CMPS 5433 – Parallel Computing – Chapter 3 Vocabulary

Sections 3.1 – 3.3 – DUE Tuesday, November 17 – class time
1. Parallel Pattern
2. Deterministic
3. Nesting Pattern
4. Functional Decomposition
5. Parallel Slack
6. Recursion
7. Alias
8. Map Pattern
9. Pure Function
10. Stencil Pattern

Sections 3.3 – 3.5
1. Reduction Pattern
2. Scan Pattern
3. Prefix Sum
4. Stack
5. Heap
6. Pack
7. Unpack
8. Pipeline

Questions
1. Compare & Contrast FORK & SPAWN.
2. Compare & Contrast JOIN & BARRIER.
3. Given an array of size 10, containing the following data (3, 4, 1, 4, 5, 2, 8, 9, 1, 9).
   Demonstrate the scan operation (parallel prefix sums) showing EVERY step.
4. State & describe 2 specific examples of when Pack could be useful.