1. Concurrency vs. Parallelism
   1. Concurrency is defined as when two or more tasks can start, run, and complete in overlapping time periods.
   2. Parallelism is when all the tasks runs at the same time.
2. Calculating the speedup gain of an application that has a 60% parallel component. Since it is 60% parallel component, then it is 40% serial component thus S = .4. We can use the equation for Speedup. Speed up where S = the Serial component and N is the number is the processing core.
   1. Two processing cores
      1. So if we use the equation Speed up = = 1.428571
   2. Four processing cores
      1. if we use the equation Speed up = = 1.818181