# Inf-2202 Sample exam

**1) Equation Kernel**

Read section 2.3.1 in Parallel Computer Architecture: A Hardware/Software Approach.

**a)** Describe how the kernel can be decomposed

**b)** Describe how the decomposed kernel can be assigned

**c)** What is the major performance goal for decomposition? What is the major goal for assignment?

**d)** Implement a parallel version of the kernel using Go


**2) Performance evaluation**

**a)** What are the major steps to consider when designing a performance evaluation study?

**b)** What are the advantages and disadvantages of using respectively measurement, simulation and modeling for performance evaluation.

**3) MapReduce**

**a)** Implement WordCount in MapReduce

**b)** What characterizes applications for which Hbase is a better choice for data storage than MapReduce.

**c)** Design a performance evaluation study for measuring the parallel performance of your WordCount MapReduce program.