Fundamental Algorithms 4

Exercise 1

Write a parallel program that computes the scalar product of two vectors (stored in two arrays). Discuss the runtime complexity on the EREW PRAM model. How many processors can be used?

Exercise 2

Extend the program of exercise 1 to compute a matrix-vector or matrix-matrix product. Again, discuss the runtime complexity on the EREW PRAM and state the number of processors that are used.