UCF

School of Computer Science
CDA 4150 Computer Architecture
Summer 2005

Homework 2: Systolic Arrays

Due 27/6/05

1. Using power point, show a step by step execution of a matrix vector multiplication, y=Ax, on a linear systolic array as the one explained in class. Use a 4 x 4 matrix. Derive T(n).

2. Using the same systolic array compute these two matrix vector products, y=Ax and w=Bv, simultaneously (show the execution step by step). Find T(n) and compare it to the value of T(n) found in the former question.