

April 18, 2013

Name \_\_\_\_\_

6.035 Spring 2013

Miniquiz #21

5 minutes

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1. Provide the distance vectors for the following loops:

(a) `FOR I = 1 to n`  
    `A[I] = A[I] + 1`

(b) `FOR I = 1 to n`  
    `FOR J = 1 to n`  
        `A[I, J] = A[I, J - 1] + 1`

(c) `FOR I = 1 to n`  
    `FOR J = 1 to n`  
        `A[I, J] = A[I - 1, J + 1] + 1`

2. Which of the above loops can be parallelized using the distance vector method? If it can be parallelized, describe how. Remember that each loop in a loop nest may be individually parallelizable.