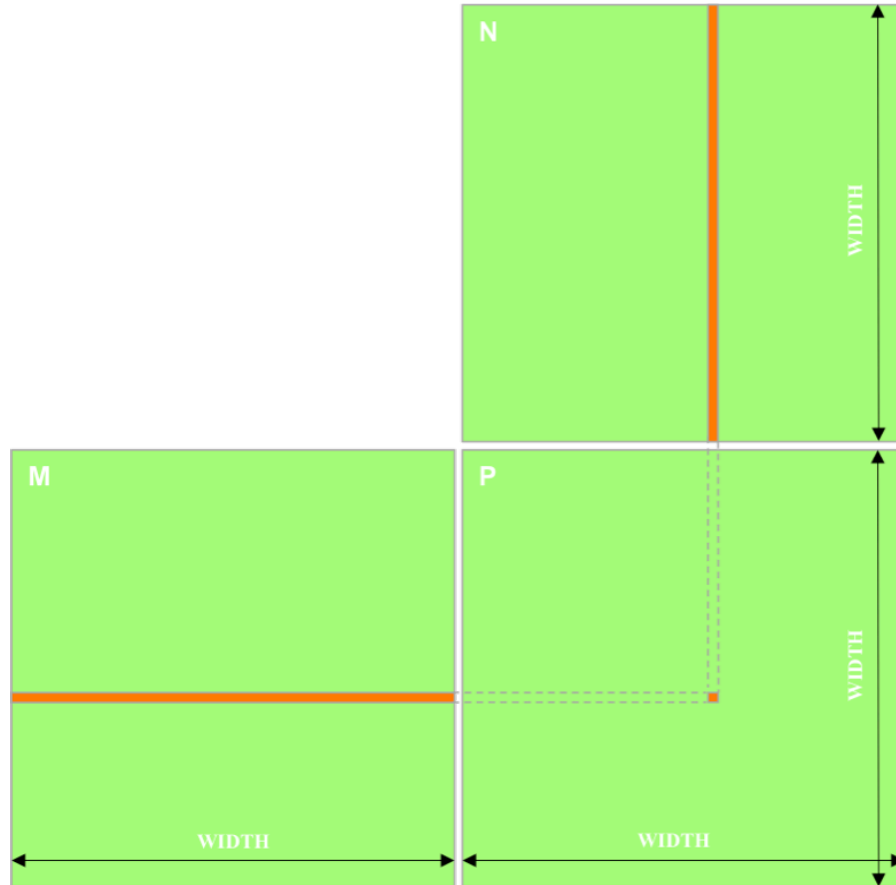


Homework 3-5
CSC 469/585 High Performance and Availability Computing

Due date: January 9, 2009 (hw3), Jan 18, 2009 (hw4 & 5)

Matrix Multiplication $P = M * N$ of size WIDTH x WIDTH



One idea to solve this in parallel is to

- One thread handles a chunk of P
- M and N are loaded WIDTH times from global memory

HW3)

- 1) Run PS3 version of Matrix multiplication •on a single PS3
- 2) run a version (spe theard + MPI) span across many PS3s

•Run each program with MxN from 100x100, 1000x1000, 10000x10000 and 100000x100000.

•Compare your above results, plot graph (size vs time) and discuss your observations

HW4-5) develop the matrix multiplication on CUDA (hw4) & Open MP (hw5) and run the same test as HW3. Compare your above results, plot graph (size vs time) and discuss your observations