Xilun Guo

Understanding the problem.

This problem is about how to create and print a 2D array for the user whatever they want to use test file or just enter number of rows and cols, and then find the greatest 4 adjacent numbers, the position of the start point as well as the shape.

Devising a plan.

Make several functions for finding greatest products, and write a matrix on a paper to make it easier to image how to find that using different kind of shapes.

Make a create array and a test file functions for creating a matrix and then call the print matrix function after them to print out the 2D matrix.

Test Plan/Looking back.

Command	Output	Actual
a.out –test < test.txt	correct 2D matrix, greatest: 625 position: 1, 2 shape: Zia-zig	Yes
a.out –teet < test.txt	Bad argument or type wrong	Yes

Input	Output	Actual
Rows = 6 Cols = 6	correct 2D matrix greatest: 2310000 Position: 2, 3 Shape: L4 right up	Yes
Rows = 6.1	Bad number!	Yes
Rows = q	Bad number!	Yes