HOMEWORK 2, MATH 247 - FALL 2011

Problem A: Consider the $n \times n$ square array of points in the plane $S = \{(i, j) \mid 0 \leq i, j < n\}$ where $n > 1$. Is it possible to draw a path consisting of line segments between the points in this array such that the path meets and changes direction at every point in S, and such that no two line segments making up the path have the same length.