

Algorithm Design
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Solution of Exercise C-1.27

Start at the upper left of the matrix. Walk across the matrix until a 0 is found. Then walk down the matrix until a 1 is found. This is repeated until the last row or column is encountered. The row with the most 1's is the last row which was walked across.

Clearly this is an $O(n)$ -time algorithm since at most $2 \cdot n$ comparisons are made.