Algorithm Design
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Solution of Exercise C-3.29

To count the number of 1's in A, we can do a binary search on each row of A to determine the position of the last 1 in that row. Then we can simply sum up these values to obtain the total number of 1's in A. This takes $O(\log n)$ time to find the last 1 in each row. Done for each of the n rows, then this taks $O(n \log n)$ time.