

## C-8.5

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 takes  $O(n \log n)$  time.