The seats on even and odd columns form a bipartite graph, and we only need to compute the maximum independent set, or equivalently bipartite matching. There are $|V| = O(nm)$ nodes and $|E| = O(nm)$ edges, so the running time is $O(|E|\sqrt{|V|}) = O((nm)^{3/2})$ or $\tilde{O}(|E|^{4/3}) = \tilde{O}((nm)^{4/3})$ [1].
The graph is special, so we can further improve the running time?

This is Google Code Jam 2008 Round 3 Problem C - No Cheating https://code.google.com/codejam/contest/32002/dashboard#s=p2

References

[1] Kyriakos Axiotis, Aleksander Madry, and Adrian Vladu. Circulation control for faster minimum cost flow in unit-capacity graphs. *arXiv preprint arXiv:2003.04863*, 2020.