

**CS2223**  
**HW#7**

**DUE:** Thursday, December 16

1. (12 points) We want to estimate in how many ways there can be a tie in the electoral college in a two candidate election. To simplify our estimate we assume that Maine and Nebraska can not split their votes. That is, we assume that Maine must cast all its 4 votes for the same candidate, and Nebraska must cast all its 5 votes for the same candidate. There are many tables of electoral college votes, by state, on the Web. One may be found at

[http://www.fairvote.org/e\\_college/popandvotes.htm](http://www.fairvote.org/e_college/popandvotes.htm)

Estimate the number of ties. Show how your estimate changes as you invest more resources (computational time). In case your system gets an overflow because the intermediate numbers you compute are too large, then you may fall back onto solving the problem for, say, the first 30 states. But try to avoid this situation.