Day 3

1. Review of Voting Methods so far

(a) Plurality Voting Candiclate with the most votes wins. In case of a fie, some run-off method is required. (Coinflip?)

- (b) Instant Runoff Voting IRV or Ranked Choice Voting (RCV)
 A candidate with a <u>majority</u> of 1st place votes wins.
 If no one gets a majority, then the candidate with the fewest 1st place votes is eliminated and a new preference Schedule is constructed.
 Either a candidate wins a majority in the new schedule or the elimination process continues.
- 2. Borda Count
 - (a) description: Assign points to candidates based on rankings:
 1 pt for last place, 2 pts for next to last 3 pts for next to next to last ...
 1 last ...
 Sum the points for each candidate. The one with the most points wins.

	# votes	3	4	2	1	1	
	1st choice	A	В	C	C	D	~ 4points
(b) example:	2nd choice	C	C	D	В	C	4-3points
	3rd choice	B	D	В	А	В	4-Zpoints
	4th choice	D	A	Α	D	Α	4 lpoint
A: $4(3)+3(0)+2(1)+1(4+2+1)=21$ B: $4(4)+3(1)+2(3+2+1)+1(0)=31$ C: $4(2+1)+3(3+4+1)+2(0)+1(0)=36$ D: $4(1)+3(2)+2(4)+1(3+1)=22$ Note: C is not the pluvality winner!							

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lecture notes

3. Copeland's Method (a) description: Compare each pair of candidates in a one-on-one match. Assign 1 point to the winner or \pm point to each in the case of a tie. Sum the points for each candidate. The one with the largest sum wins. # votes 3 4 2 1 1 С С D A B 1st choice C C D B С (b) **example:** 2nd choice 3rd choice B D B A В DAA D Sum points 4th choice A \bigcirc v 5 B C. wins ٧S В A A 3+2+1+1 \mathcal{O} 4 4+2+ 41 ઽ 7 2 B wins Bwins Z C D B vs C γS A 3+4+1 2+1 3 8 3 8 Cwins × BWINS A vS D C vs \square wins 3+3+2+1 4 Dwins 10 CWINS X