**Runoff**

If any candidate has >50% of the 1st preference votes, that candidate is declared the winner of the election

Else → Instant Runoff occurs. The candidate with the least votes is eliminated and anyone who originally chose that candidate as their first preference now has their second preference considered.

*Edge Cases*

Tie for who should be eliminated. In this case, both are eliminated.

If every remaining candidate has the exact same number of votes though eliminated the tied last place candidates mean eliminated everyone – so we’ll have to be careful not to eliminate everyone and just declare the election a tie between all candidates

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Vote function

Takes arguments – voter, rank, name

* If name == valid candidate >> update global preferences to indicate that the voter has that candidate as their rank ( 0 = 1st, 1 = 2nd etc)
* Successful? >> return true else false

Tabulate function

* Update the number of votes each candidate has at this stage in the runoff
* Every voter effectively votes for their top pref- candidate who has not already been eliminated

Print Winner function

* If any candidate has >50% of vote, their name should be printed and the function return true;
* If nobody >50% return false

Find min function

* Return minimum vote for any candidate still in the election

// opposite of max function

// int min.

Is\_tie function

* Min= number of votes currenty >> return true if every candidate remaining in the election has equal votes else return false

How do we know theres a tie?

1. How many candidates have the min votes?
2. How many candidates are NOT eliminated
3. If BOTH are the same we have a tie

Count the number of candidates remaining in the election

Count the number of candidates whose vote count = min

If both are same – we have a tie.

Eliminate function

* Takes min (minimum number of votes that anyone in the election has)
* (update) Eliminated = true