## Plurality Voting : Example

| type 1 voters | type 2 voters | type 3 voters | type 4 voters |
| :---: | :---: | :---: | :---: |
| $41 \%$ | $30 \%$ | $19 \%$ | $10 \%$ |
|  |  |  |  |
| w | x | y | z |
| y | y | z | y |
| z | z | x | x |
| x | w | w | w |

the winner: w
the Condorcet winner : y

## Single Runoff

if no candidate gets more than $50 \%$ of the vote, do a second election, between the 2 candidates with the most votes in the first round
in the previous example, the first round led to the results :
w 41 \%
x 30 \%
y 19 \%
z 10 \%
so under the "Plurality with a Runoff" rule, we would go to a second round (since no candidate got $50 \%$ or more in the first round), with
the top two vote-getters in the first round - w and $x$ - going up against each other in the 2nd round
(with $y$ and $z$ eliminated)
in the 2nd round, voters of type \#3 and of type \#4 must change their votes, since their favourite candidates have been eliminated
they have to choose between $w$ and $x$
in this example, both type \#3 voters and type \#4 voters rank $x$ above $w$, so they would switch their votes from $y$ to $x$ (type \#3) or from $z$ to $x$ (type \#4) in the second round
so $x$ wins the runoff (2nd round), since voters of type \#2, type \#3 and type \#4 all prefer $x$ to $w$, so that $x$ defeats $w$ by $59 \%$ to $41 \%$ in the runoff round

