Worksheet 14

Consider the following ballots for an election with four candidates $A$, $B$, $C$, and $D$.

\[
\begin{array}{cccc}
A & B & D & C \\
B & D & C & B \\
C & C & B & A \\
D & A & A & D \\
\end{array}
\]

1. Apply the Condorcet method to determine the winner.

2. Apply the plurality voting method to determine the winner.

3. Apply the Borda count method to determine the winner.
4. The point of this problem is to show that the Borda count method does not satisfy “Independence of Irrelevant Alternatives”.

Construct an example of an election with four candidates $A$, $B$, $C$, and $D$ in which $A$ is the winner.

Now change your example slightly so that $B$ becomes the winner. In your change, you may move any of the candidates on any of the ballots, but you may not move $B$ from a position below $A$ to a position above $A$. 