

Remove floors

There are 2 buildings, building 1 got x floors and building 2 got y floors:



A game:

There are 2 players playing while taking turns, here are the rules:

- Every turn, the player will choose a building (x or y) and remove any positive number of floors from the building.
- The player that removes the last floor (both buildings got no more floors) in his turn will win.

Question:

Would you like to play first/second and how can you win this game?

You should go first if:

If tower x and tower y got different number of floors you should remove floors from the taller building.

Now both of the buildings got the same number of floors and it's the second player turn, all you need to do is to copy the second player moves and apply them on the other tower (if he will remove 5 floors from tower y you should remove 5 floors but from building x)

At some point the second player will totally remove the floors on building x/y and your next move will do the same but for the other building, after that there are no more floors and you will win

You should go second if:

If both buildings got the same number of floors, then all you need to do is copy the moves of the first player and win just like before.