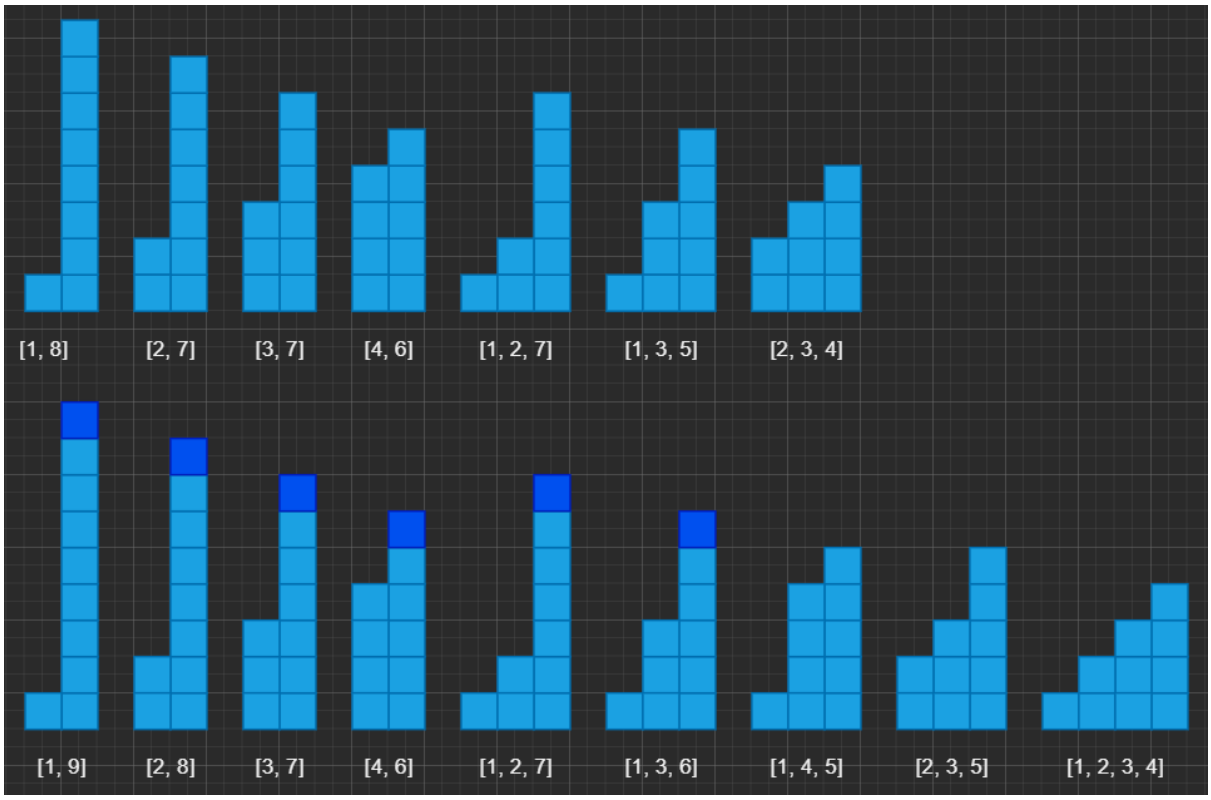
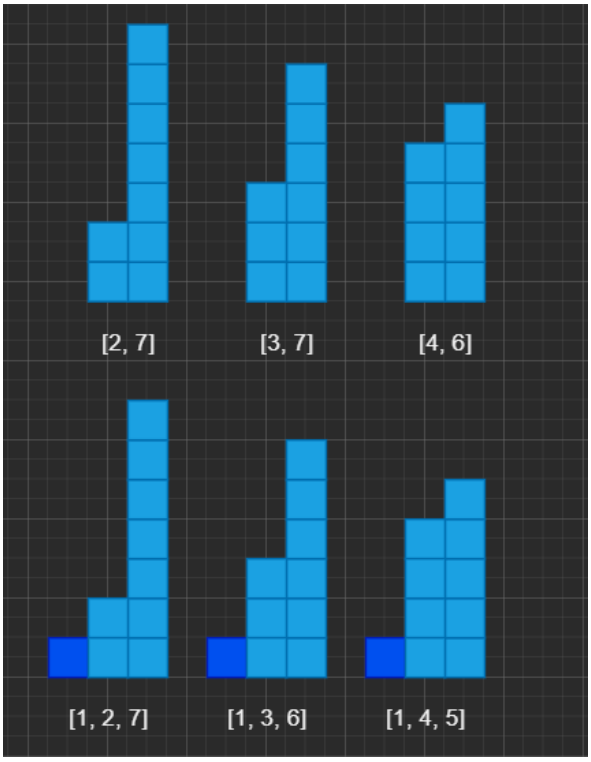
a) and b)



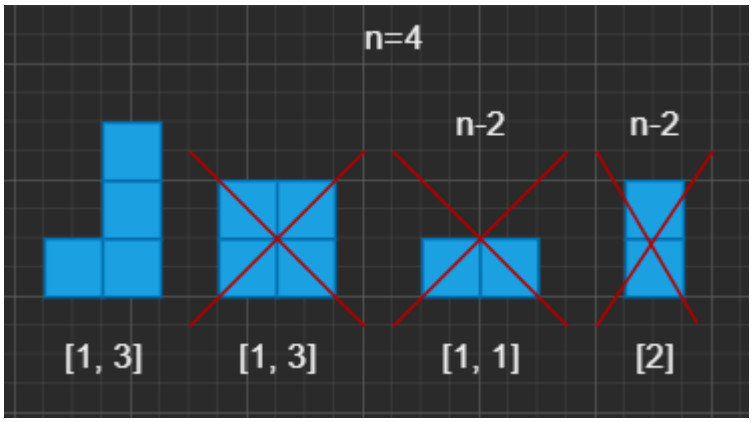
c) The overlapping sub problem between 9 boxes with 2 stacks and 10 boxes with 3 stacks. 9 boxes with 2 stacks is the same as 10 boxes with 3 stacks when you take away the first stack.

d) For example: take away the dark blue box and you have the same stacks.

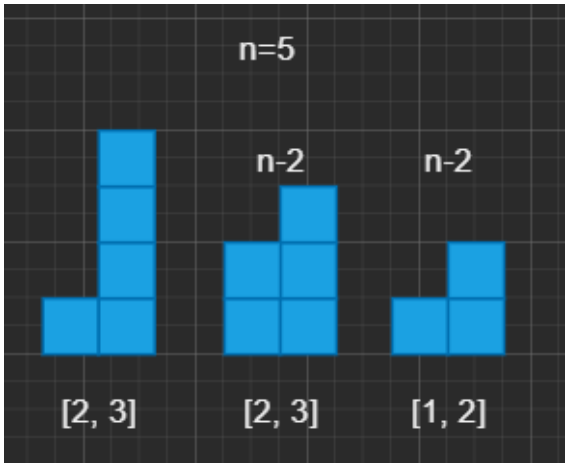


e) A stack with just one box then add one box to the single stack then take 2 boxes.

N=4 is invalid



N=5 is valid



Therefore, it is no longer possible to do so when n <= 4

f)

The next stack can only be less then the previous, thereforce the next stack will be one less.

This can lead to an invalid arrangement when the last stack is greater than or equal to the stack before the last stack because of rules 3 and 4.
For example: 3 >= 2 therefore invalid arrangement