

If we have 1 stick in the pile, computer is always lose.

On condition and let  $N$  as count of stick in the pile

- $N==2$  or ( $N \geq 5$  and  $(N - 4) \bmod 3$  is 1)
- $N==3$  or ( $N \geq 6$  and  $(N - 4) \bmod 3$  is 2)

that computer starts to pick first,

computer will win if its start to pick at 1 and 2, respectively.

Or another condition before it just hope player take out wrong that computer can have more chance to win.

Computer have to take out the wood before there are 4 left.