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Regulars

## The coin tossing problem



Imagine an infinite sequence of coin tosses, and suppose you win a penny every time there is a sequence of  $k$  heads in a row followed by a tail (in other words, at every occurrence of the sequence HHH...HT of  $k$  heads followed by a tail). If  $k$  is large then you will not win pennies very often, but you will certainly win some sooner or later.

How many pennies are you likely to win in the first  $n$  tosses of the coin?

### Solution

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