Lempel Ziv Compression
remember to work on bits
 - adaptive dictionary coder
 - going to have # & code

Make a dict w/ a tree
- trie (can be a lookup table instead, it's faster)
   - "prefix tree"

-good w/ long prefixes ex: th; qu.
   -look for strings

Predict the next letter
w/ $ # encode string
ex) ababab a
        ↑

    2   a
    3   b
    4   ab
    5   ab a

cannot compress randomness
 bc cannot compress entropy
                    ↑
              measure of
              predictability