PROBLEM:

1. How do we know what information a page contains?
   1. We search the text of the page
   2. We search the URL of the page
2. For e.g. bedbathandbeyond.com yields “bed, bath, beyond, hand, bat”
3. Given:
   1. A set of strings – the control set
   2. A string/name/URL – the one to be checked.
4. Expected result – tell us whether a string is made out of a concatenation of a list of dictionary words.
5. Start by looking at other examples, not just the one given in the question
   1. Multiple occurrences of the same word.
   2. i.e. ‘a’ occurs multiple times in

SOLUTION:

1. Looks like sliding window
2. Sliding window mean repeatable problems
3. Repeatable problems mean dynamic programming
4. Dynamic programming means
   1. Brute force is only recursion
   2. Optimized is “Recursion or iteration with cache”
5. Make a cache of “prefixes of the string”
   1. String here means the dictionary words
   2. Prefixes would be prefixes of those dictionary words that either are or aren’t, in the dictionary.
   3. The value of the cache is whether that “prefix of the string” can be decomposed into valid dictionary words.
6. So, the steps are
   1. We don’t have to check whether the entire string can be decomposed into valid dictionary words
   2. We have to find if the prefix of the string can be decomposed
   3. And if those prefixes are returned, for the entire string we have a solution.
7. The DP function:
   1. A prefix can be decomposed into a sequence of valid dictionary words
      1. If it is a dictionary word
      2. If it is a dictionary word + A prefix that can be decomposed into a sequence of valid dictionary words