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|  | **The Cow Lexicon** | |  |  | | --- | --- | | Prob# | lexicon | | Author | Vladimir Novakovski | | Date | 20020225 | | From | USAICO 2006 Day 5 | |

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| Problem lexicon: The Cow Lexicon [Vladimir Novakovski, 2002]  The cows have a dictionary, you know. It contains W (6 <= W <= 1000)  words, each at most 20 characters long. Because their cowmunication  system, based on mooing, is not very accurate, sometimes they hear  words that do not make any sense. For instance, Bessie once received  a message that said "browndcodw." As it turns out, the intended  message was "browncow" and the two letter "d"s were noise from other  parts of the barnyard.  The cows want you to help them decipher a received message of length  L (2 <= L <= 1600) characters that is a bit garbled. In particular,  they know that the message has some extra letters, and they want  you to determine the smallest number of letters that must be removed  to make the message a sequence of words from the dictionary.  PROBLEM NAME: lexicon  INPUT FORMAT:  \* Line 1: Two space-separated integers, respectively W and L  \* Line 2: L characters (followed by a newline, of course): the  received message (the message contains only the characters  'a'..'z')  \* Lines 3..W+2: The dictionary, one word per line; words consist only  of the characters 'a'..'z'.  SAMPLE INPUT (file lexicon.in):  6 10  browndcodw  cow  milk  white  black  brown  farmer  OUTPUT FORMAT:  A single line with a single integer that is the smallest number of  characters that need to be removed to make the message a sequence of  dictionary words.  SAMPLE OUTPUT (file lexicon.out):  2 |

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