Regular Expressions – Advanced

Kim – Exercises E – Gabor

Apply your regular knowledge to find regular expressions for the following dictionary questions. Assume that you have a dictionary of words where there is one word per line, and you wish to identify some small subset of these words. Some words may have contractions or spaces, and some words may be capitalized, depending on the dictionary. Your expression should be sufficient to show no more than 15 candidate words. Due March 1.

The form for the submission will be a command line script that takes a single integer as input from 71 to 80 (not 61 to 70), inclusive, and outputs the corresponding regular expression pattern, just as with prior HW. The pat­tern is to be delimited by forward slashes and any options should immediately follow the final slash. Letters imply case insensitivity.

71. Find the shortest word where some letter occurs 4 times.

72. Find the shortest word where each vowel appears at least once.

73. Find the longest word containing exactly 5 vowels.

74. Find the longest word where the first three letters form a palindrome with the final three letters.

75. Find the longest word with the longest contiguous block of one letter.

76. Find the longest word with the greatest number of a repeated letter.

77. Find the longest word with the most number of adjacent pairs of identical letters.

78. Find the longest word where each letter is repeated at least once.

79. Find the longest word where each letter is repeated exactly one time.

80. Find the longest word where no letter is repeated more than once.