

Laboratory 9:

Problem 1:

Write a function that asks the user for a number in miles. It then converts the number to kilometers and prints it out. Make sure that the answer has only 3 digits after the decimal point.

Problem 2

Write a function of a single number. The function prints out all numbers, whose square divides the parameter. For example, if the function parameter is 1065764700, then the function should print out 1, 2, 3, 5, 6, 7, 10, 13, 14, 15, 21, 26, 30, 35, 39, 42, 65, 70, 78, 91, 105, 130, 182, 195, 210, 273, 390, 455, 546, 910, 1365, 2730.

Problem 3

Write a function of a single argument, a string. The function returns a string where each occurrence of the lower case vowels is replaced with lower case vowel - h - lower case vowel and each occurrence of an upper case vowel is replaced with upper case vowel - h - lower case vowel. For example lab9c("Ahmedabad") gives 'Ahahmehedahabhad'.

Problem 4

Write a function of a single argument, a string. The function returns the same string, but all doubled letters are replaced by only one of the letters. For example, lab9d("crosssection") yields 'crosection'. As an aside, triple consonants are forbidden in English. If they appear, then usually a hyphen is used ("cross-section") or one of the letters drops out (somebody who sees is a "seer", not a "seeer".)

Problem 5

Write a function that opens Lawler's list of English words and prints out all words that

1. have a double "u" (like "vacuum")
2. have all vowels in order (like "abstemious").