

Ejercicios

1.- Bubble Sort (Extraído de Lab3 – 2014-2)

Print the partially sorted arrays that result in each iteration of bubble sort. For each test case, the first digit represents the number of elements to be sorted.

Sample Input	Sample Output
9 12 3 100 6 43 18 8 12 2	3 12 6 43 18 8 12 2 100
4 200 60 20 8	3 6 12 18 8 12 2 43 100
4 -200 -60 -20 -8	3 6 12 8 12 2 18 43 100
	3 6 8 12 2 12 18 43 100
	3 6 8 2 12 12 18 43 100
	3 6 2 8 12 12 18 43 100
	3 2 6 8 12 12 18 43 100
	2 3 6 8 12 12 18 43 100
	60 20 8 200
	20 8 60 200
	8 20 60 200
	-200 -60 -20 -8
	-200 -60 -20 -8
	-200 -60 -20 -8

2.- Uva 156 – Ananagrams

Most crossword puzzle fans are used to anagrams – groups of words with the same letters in different orders – for example OPTS, SPOT, STOP, POTS and POST. Some words, however, do not have this attribute; no matter how you rearrange their letters, you cannot form another word. Such words are called ananagrams; an example is QUIZ.

Obviously, such definitions depend on the domain within which we are working. You might think that ATHENE is an ananagram, whereas any chemist would quickly produce ETHANE. One possible domain would be the entire English language, but this could lead to some problems. One could restrict the domain to, say, Music, in which case SCALE becomes a relative ananagram (LACES is not in the same domain) but NOTE is not since it can produce TONE.

Write a program that will read in the dictionary of a restricted domain and determine the relative ananagrams. Note that single letter words are, ipso facto, relative ananagrams since they cannot be “rearranged” at all. The dictionary will contain no more than 1000 words.

Input: Input will consist of a series of lines, each with one word. Words consist of up to 20 upper and/or lower case letters. Note that words that contain the same letters but of differing case are considered to be anagrams of each other, thus tleD and EdiT are anagrams. The file will be terminated by a line consisting of a single #.

Output: Output will consist of a series of lines. Each line will consist of a single word that is a relative anagram in the input dictionary. Words must be output in lexicographic (case-sensitive) order. There will always be at least one relative anagram.

Sample Input	Sample Output
ladder came tape soon leader acme RIDE lone Dreis peat ScAlE orb eye Rides dealer NotE derail LaCeS drIed noel dire Disk mace Rob dries #	Disk NotE derail drIed eye ladder soon