

General problems

Bear in mind the primary goal is to design computational efficient solutions to the problems below, they should be written in C Language and are intended to be run in a single-threaded environment under Linux.

Specific features of C, which are appropriate to code the solutions to these problems, will be discussed in tutorials. You should, however, develop your own solutions first.

1. Write a program that reads in succession several text files `text#.txt` whose names are provided in the command line and prints a listing of total number of words, number of words beginning with a vowel and number of words ending with a consonant for each of the supplied files.
2. Write a program that reads in succession data files containing square matrices with real coefficients and computes for each its determinant.