

# 1. Jacobi Method

Time limit	1 second
Memory limit	64Mb
Input	standard input or input.txt
Output	standard output or output.txt

Write a computer program in C++ programming language to solve the given system of linear algebraic equations with the use of iterative Jacobi method.

## Input format

The input contains:

- A square matrix  $A$  (in element-wise manner with the dimension firstly) as in the previous exercises.
- A vector of free coefficients  $b$  (in element-wise manner with the dimension firstly).
- The approximation accuracy  $\varepsilon$ .

## Output format

The output contains:

- The string "The method is not applicable!"

or

- Matrix  $\alpha$ , entitled "alpha:"
- Vector  $\beta$ , entitled "beta:"
- Set of vectors  $x_i$  of the approximation steps, each entitled "x(i):"
- Current accuracy  $e$  for each step, entitled "e:" (skipped for the last step).