

Numerical Methods - Assignment 6

Due Sunday, Sep 29

1 - Write a Matlab function

`luinv(M , n)`

which receives an invertible matrix M of size $n \times n$ and return its inverse. You are not allowed to use Matlab's tools for vectorial computation. Instead, you must use the algorithm described in class, or a similar algorithm based on the LU factorisation.

2 - Measure the computing time of your function for matrices of increasing sizes. Compare with the computing time of Matlab's built-in function. Represent both using a logo-log scale.