

# Introduction to Scilab

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(The sequence of spoken tutorials to be listened/followed is same as that of exercise sets below.)

## Scripts and Functions

Solve the following examples on the Scilab Console as soon as the relevant topic is explained in the tutorial.

1. Create a scilab script file to display time on console window. (hint: `clock()`)
2. Create a scilab script file to display product of a matrix A and inverse of A.  $A = [1, 1; 1, -1]$
3. Create a function file to calculate sum and difference of any two numbers. The output should be the sum and the difference of numbers.
4. Create a function file to calculate the rowwise and columnwise mean and standard deviation of a user defined matrix. Display the matrix, its mean and standard deviation in output. (hint; `mean()`, `stdev()` )
5. Create an inline function to sort the elements of a random vector in descending order. (hint: `gsort()`)
6. Create an inline function to round off the elements of a vector  $[1.9, 2.3, -1.1, 50.5]$  to the nearest integer. (hint: `round()`)
7. Create a function file to calculate LU factorization of a matrix. (hint: `lu()`).