

Introduction to Scilab

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Indian Institute of Technology Bombay,

Organised by FOSSEE Group, IIT Bombay, <http://scilab.in>

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

2. Vector Operations

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

1. Define two vectors A,B with 1,5,8,19 and 19,8,5,1 elements respectively.

Calculate $A*B-B*A$

Calculate $A*A+B*B$

2. In Scilab, enter the following Matrices:

$$A = \begin{bmatrix} 1 & 1/2 \\ 1/3 & 1/4 \\ 1/5 & 1/6 \end{bmatrix}$$

$$B = [5 \ 2], \quad C = \begin{bmatrix} 4 & 5/4 & 9/4 \\ 1 & 2 & 3 \end{bmatrix}$$

Using Scilab commands, compute each of the following, if possible and explain the errors, if any.

3. $A * C * A$

4. $2 * C - 6 * A$

5. $(2 * C - 6 * A') * B'$

6. $(2 * C - 6 * A') * C'$