

PGE 306: Matlab tutorial

Laurent Pfeiffer, Inria-Saclay

January-February 2021

1 Variables and functions

- Organisation of the screen (current folder, open files, declared variables, results).
- Script file/function file.
- Declaration and modification of variables.
- Writing functions, local variables.
- Global variables.

2 Arrays

- Declaration of row and column vectors, matrices.
- Reading and modifying an entry.
- Useful functions: zeros, ones, length, size.
- Extraction of rows and columns.
- Concatenation of arrays.

3 For loop

- Basic syntax.

4 Debugging

- Displaying a variable.
- Stopping point.
- Error messages.

5 Optimization tools

- Linear programming
- Nonlinear programming.