

STUDY OF BASIC SCILAB COMMANDS

EXP. NO: 1

i. OBJECTIVE: Practicing MATLAB environment with simple exercises to familiarize Command Window, History, Workspace, Current Directory, Figure window, Edit window, Shortcuts, Help files.

ii. SOURCE CODE :

Working on general commands on scilab environment

Help – detailed help menu for scilab commands

Who – list all the variables from the variable browser window

Whos - list all the variables with byte size, variable type etc.

Cle – Clears command window

Clear – Removes the variable from memory

Quit – to close the session

Pwd – present working directory

Ls – list the files

Ls -ltr – list the detailed view on the files

Cd - to change the directory

Mkdir – to create a new directory

To work on Special variables / Pre-Defined Variables

%pi – 3.14

Ans

% e = 2.718

%eps – epsilon

%inf – infinity

Basic Scalar & Vector Operations

Creation of Scalar Elements

$Y = [1 \ 4 \ 6]$ → Declares a row vector

$yT = [1; 4; 6]$ → Declares a Column vector

Creation of Vector Elements

$Y = [1 \ 4 \ 6; 2 \ 7 \ 3; 4 \ 1 \ 1]$

→ Creates a 3*3 matrix

To determine the size / order of the vectors.

Size(y)

To change the elements in the given vector

vector(i,j) = value

Performing element by element operations using dot operator

.*, ./, .^,

Linspace[a,b,N] → Vector can be created by evenly spaced points. From a to b the vector is created by 'N' evenly spaced points

Eg: linspace[0,1,5] → 0 0.25 0.5 0.75 1

Transpose of a matrix – y'

ans =

1. 2. 4.

4. 7. 1.

6. 3. 1.

RESULT

Study of basic SCILab commands are worked and executed