Scialb cheat sheet

input	user input. example: `x=inpu t("How many iterat ion s?")`
disp	displays variables
matrix	example: `[1 3 4 6;5 6 7 8]` ',' means row & ';' means column
repmat	replicate's matrix.
plot	*used to create plots* in the **plane**.
sqrt	square root.
modulo	syntax: `x (mod y)`
ones	matrix made of ones. syntax: `ones(x,y)` Matrix of size x × y
zeros	matrix made of zeros. syntax: `zeros(x,y)` Matrix of size x × y
rand	Returns a *real number randomly* taken **between 0 and 1**.

function	syntax:
	`function [output arguments] = functi onn -`
	`ame (input arguments)`
	`instructions`
	`endfun ction`

plot(x,y)	graph of 'x' vs 'y'.
plot2d	plots a set of **2D curves**.
plot2d2	It is the same as plot2d but the functions given by (x,y) are supposed to be "piecewise constant".
plot2d3	It is the same as plot2d but curves are plotted using "vertical bars".
plot2d4	It is the same as plot2d but curves are plotted using "-arrows style".
fplot2d	2D function plot
fplot3d	3D function plot.
subplot()	plots **multiple graphs** on a single graphic window.
comet	2D comet animated plot.
paramf-plot2d	animated plot of a 2D parametrized curve.
strrev	returns string reversed.

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deff	It is an *embedded scilab function* for defining **custom functions**. The deff() function receives 2 arguments(both strings). Each string contains parts of the function definition which are going to be evaluate by Scilab and turn into instructions. example:`deff(' y=f (x) ',' y=s qrt(x. 2- 5*x + 6)')` for: $f(x)=\sqrt{x2} - 5x + 6$
complex	complex number: syntax: `x+%i` This will dislay complex number $x + i$ where, $i = \sqrt{-1}$
mopen	**opens a file** in scilab. syntax: `mopen( SCI +'/ fil e.txt', 'rt')`
mputl	**writes strings** in a text file. syntax: `r = mputl(txt, file_desc)`
mgetl	**reads lines** from an text file. syntax: `txt = mgetl( fil e_desc [,m])`
mclose	**closes an opened file**. syntax: `mclose (fi le_ name)`
linspace	It generates a row vector of 'n' equally spaced values ranging exactly from "x1" to "x2". *in short*, vector of size n whose components are equidistant.
clf	It can be used to delete all children of a given graphic window, hence 'clearing it'.
isoview	This property is used to have isometric scales on the x, y and z axes (for exemple to make the display of the curve sin(x) versus cos(x) be a circle not an ellipse).
gsort	gsort performs a "quick sort" for various native data types. By default- Sorting is performed in decreasing order 'd'. syntax: `gsort( inc rea ,'g ', 'd')`where, i represents increasing order & 'd' for decreasing order *(default)*.