

Scilab cheat sheet		Scilab cheat sheet	
input	user input. example: <code>x=input t("How many iterat ion s?")</code>	deff	It is an <i>embedded scilab function</i> 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: <code>deff(' y=f (x) ',' y=s qrt(x.^2 - 5*x + 6)')</code> for: $f(x) = \sqrt{x^2 - 5x + 6}$
disp	displays variables	complex	complex number: syntax: <code>x+%i</code> This will dislay complex number $x + i$ where, $i = \sqrt{-1}$
matrix	example: <code>[1 3 4 6;5 6 7 8]'</code> ',' means row & ';' means column	mopen	opens a file in scilab. syntax: <code>mopen(SCI +'/ fil e.txt', 'rt')</code>
repmat	replicate's matrix.	mputl	writes strings in a text file. syntax: <code>r = mputl(txt, file_desc)</code>
plot	<i>used to create plots in the plane.</i>	mgetl	reads lines from an text file. syntax: <code>txt = mgetl(fil e_desc [,m])</code>
sqrt	square root.	mclose	closes an opened file . syntax: <code>mclose (fi le_ name)</code>
modulo	syntax: <code>x (mod y)</code>	linspace	It generates a row vector of 'n' equally spaced values ranging exactly from "x1" to "x2". <i>in short</i> , vector of size n whose components are equidistant.
ones	matrix made of ones. syntax: <code>ones (x, y)</code> Matrix of size $x \times y$	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).
zeros	matrix made of zeros. syntax: <code>zeros (x, y)</code> Matrix of size $x \times y$	gsort	gsort performs a "quick sort" for various native data types. By default- Sorting is performed in decreasing order 'd'. syntax: <code>gsort(inc rea , 'g ', 'i')</code> where, i represents increasing order & 'd' for decreasing order (<i>default</i>).
rand	Returns a <i>real number randomly</i> taken between 0 and 1 .		
function	syntax: <code>function [output arguments] = functi onn ame (input argument s)</code> instructions <code>endfun ction</code>		
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.		

