# Input/Output commands

|  |  |
| --- | --- |
| **disp** | Display contents of an array or string |
| **fscanf** | Read formatted data from a file |
| **format** | Control screen display format |
| **fprintf** | Performs formatted write to screen or file |
| **input** | Display prompt and wait for input |
| **;** | Supress the screen printing |

# Numeric Display Format

|  |  |
| --- | --- |
| **format short** | Display decimal digit upto 4 decimal digit and this is by default |
| **format long** | Display decimal digit upto 14 decimal digits |
| **format short e** | Display 5 digit and exponent |
| **format long e** | Display decimal digit upto 14 decimal digit and and exponent |
| **format bank** | Display upto 2 decimal digits |
| **format +** | Display +ve or 0’s values |
| **format rat** | Display rational approximation |
| **format compact** | Supress some line feeds |
| **formal loose** | Reset to less compact display mode |

# Commands for managing a session

|  |  |
| --- | --- |
| **Clc** | Clear the command window |
| **Clear** | Clear the workspace memory |
| **Exist** | Checks for existence of file or variable |
| **Global** | Declares variables to be global |
| **Help** | Searches for a help topic |
| **Quit** | Stops the matlab |
| **Who** | List all the current variables |
| **Whos** | List all the current variables in long format |

# Special Variables and constants

|  |  |
| --- | --- |
| **Ans** | Most recent answer |
| **Eps** | Accuracy of floating point precision |
| **i,j** | Imaginary unit root(-1) |
| **Inf** | Infinity |
| **NaN** | Not a Number |
| **Pi** | The number π |

# Operators and Special Characters

|  |  |
| --- | --- |
| **+** | Addition |
| **-** | Subtraction |
| **\*** | Multiplication |
| **.\*** | Array Multiplication |
| **^** | Exponential Power |
| **.^** | Array Exponential Power |
| **\** | Left Division |
| **/** | Right Division |
| **.\** | Array of Left Division |
| **./** | Array of Right Division |
| **:** | Colon creates regular spaces element an entire row or column |
| **()** | Parenthesis |
| **[]** | Array enclosure |
| **.** | Decimal Point |
| **…** | Ellipsis |
| **,** | Separates the elements |
| **;** | Supress the display format |
| **=** | Assignment operator |
| **\_** | Quote sign |
| **.\_** | Non-Conjugate transpose operator |

# System and file commands

|  |  |
| --- | --- |
| **delete** | Deletes a file |
| **date** | Display date |
| **diary** | Document all the file records |
| **load** | Load the workspace variable from a file |
| **path** | Display search path |
| **pwd** | Display current directory |
| **save** | Saves the workspace variables in file |
| **what** | List all the MATLAB files in current directory |
| **wklread** | Reads .wkl spreadsheet file |

# Special Matrix Command for solving linear equations

|  |  |
| --- | --- |
| **det** | Determinant of a matrix |
| **inv** | Inverse of a matrix |
| **rank** | Rank of a matrix |
| **rref** | Computes row echelon form |
| **pinv** | Computes pseudo inverse of matrix |

# Symbol in Plot

|  |  |
| --- | --- |
| **.** | point |
| **+** | Plus |
| **o** | Circle |
| **\*** | star |
| **d** | diamond |
| **v** | Triangle down |
| **^** | Triangle up |
| **>** | Right |
| **<** | Left |
| **p** | pentagram |
| **h** | Hexagram |
| **-** | Solid |
| **:** | Dotted |
| **-.** | Dash Dot |
| **--** | Dashed |