

OCTAVE COMMANDS

- `~=` // Not Equal
- `% Message` // comments
- `clc` // clear terminal
- `PS1('>> ')` // to change terminal input symbol
- `0` // false
- `1` // true
- `==` // comparison

Variables:

- `a = value` //prints value
- `a = value;` // with semicolon it suppresses the printing
- `b = 'String';` // for string assignment
- `b` // print value of b
- `a=pi` // assign value of PI into a
- `a` // print value of pi

Out a = 3.1416

- `disp(a)` // print statement

Out = 3.1416

- **disp(sprintf('2 decimal: %0.2f', a))**

// displays sprint of variable

Out = 2 decimal: 3.14

// means display decimal values according to value given

- **format long**

- **a**

// displays long value of a

Out = a = 3.141592653589793

- **A = [1 2; 3 4; 5 6; 7 8]**

// creates matrix

// displays long value of a

Out =

A =

1 2

3 4

5 6

7 8

- **v = 1:0.1:2**

// creates matrix from 1 and do increment by 0.1 until 2

Out =

Columns 1 through 5:

1.0000000000000000 1.1000000000000000 1.2000000000000000 1.3000000000000000 1.4000000000000000

Columns 6 through 10:

1.5000000000000000 1.6000000000000000 1.7000000000000000 1.8000000000000000 1.9000000000000000

Column 11:

2.0000000000000000

- **v = 1:6**

// creates matrix up to 6 starting from 1

Out =

v =

1 2 3 4 5 6

- **ones(2,3)**

// creates a matrix of 1 of order 2 x3

Out =

1 1 1

1 1 1

1 1 1

- **rand(2,3)**

// creates a matrix of a random number of order 2 x3

Out =

0.173784097592126 0.296735944466070 0.792266003772464
0.695541334906015 0.888444304837793 0.829518710553532

- **randn(2,3)**

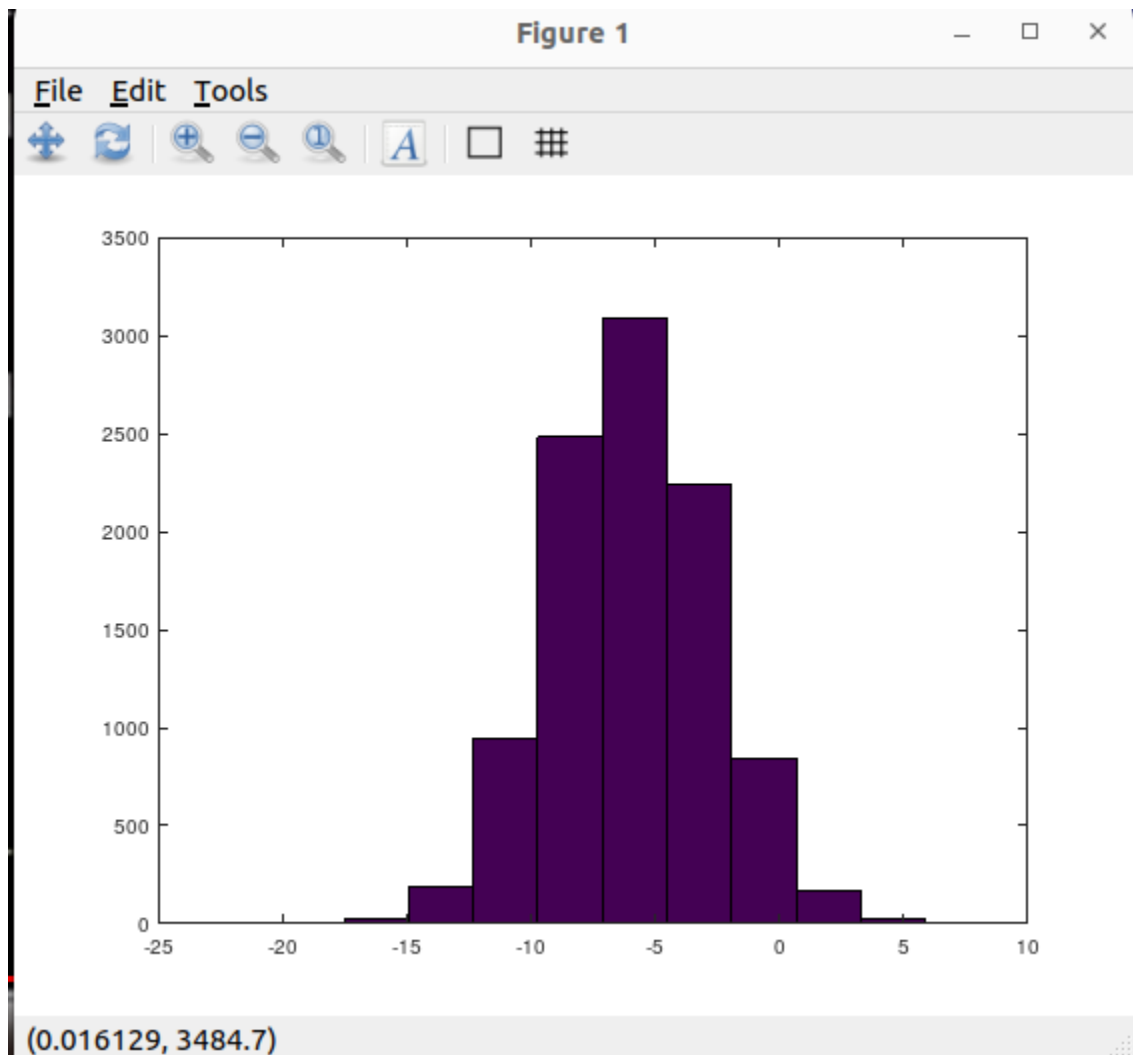
// creates a matrix of a random number of order 2 x3
of Gaussian Random Values

Out =

-3.608487993740562e-01 2.911926384437561e+00 2.213822526036592e+00
4.143580052077651e-01 -1.717117983840558e+00 8.770997108535140e-02

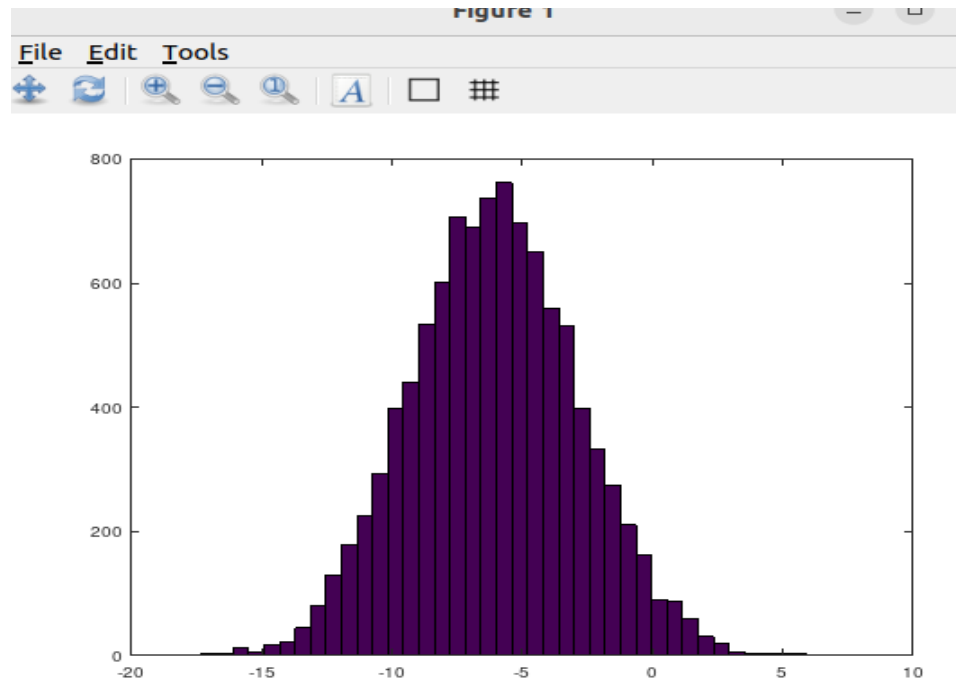
- `w = -6 + sqrt(10)&(randn(1,1000));`
- `hist(w)`

//creates a histogram of values from 1 to 1000 with mean -6



- **hist(w, 40)**

//creates a histogram of more buckets as per parameter



- **eye(4)**

//creates a 4x4 identity matrix

Out =

Diagonal Matrix

1	0	0	0
0	1	0	0
0	0	1	0
0	0	0	1

- **size(A)** //tells the size of the matrix
- **sz = size(A)** //create a matrix of elements from size

Out =

1 2

- **who** //tells the variables that we have in our scope of octave space
- **load filename.ext**
//load file present in the local working directory
- **filename**
// display file content
- **whos**
// gives the detail view

```

Octave-3.2.4
C      a      b      featuresX  sz      w

>> whos
Variables in the current scope:

  Attr Name      Size      Bytes  Class
  ==== =====
      A      3x2      48     double
      C      2x3      48     double
      I      6x6      48     double
      a      1x1       8     double
     ans     1x2      16     double
      b      1x2       2      char
      c      1x1       1    logical
  featuresX  47x2     752     double
   priceY    47x1     376     double
      sz      1x2      16     double
      v      1x4      32     double
      w     1x10000 80000     double

Total is 10201 elements using 81347 bytes

```

- **Clear variableName**

// gets rid of variable from the scope