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1  A = [1;2;3] % A is matrix of 3x1
2  v = [1:10] % v is matrix of 1x10 having numbers from 1 to 10
3  % the above statement can be thought of as 1 through(colon) 10
4  V = [1:0.5:10];
5  % the above statement can be thought of as 1 through(colon) 10 in steps(colon)
   of 0.5
6  % disp(V)
7  % note that V is still a matrix of 1x19 even if the output is displayed in
   several lines
8  % notice the output is written as Columns 15 through 19: etc
9
10 % v = [1:10] can be thought as 1 through 10 in steps of 1
11 q = mod(34,5) % q = modulus when 34 is divided by 5
12 C = ones(2,3)
13 D = zeros(3,3)
14 E = 2*ones(4,2)
15 F = rand(2,3) % random numbes (normally distributed) between 0 and 1
16 G = randn(2,3) % random numbers (gaussian distributed) whose mean is 0 and
   variance is 1
17 % so how to get random numbers between 1 and 100?
18 H = 100*rand(2,3)
19 I = eye(3,4) % identity matrix non-square 3x4
20 I2 = eye(3) % square identity matrix 3x3
21 J = 3+sqrt(2)*rand(2,3) % first a matrix of 2x3 with random numbers is created
22 % then it is multiplied by a scalar root 2
23 % then a scalar 3 is added
24 % note that above is element wise operation till now scalar add and mult are
   element-wise opr
25 % but
26 K = C*D %(matrix multiplication) not element wise multiplication
27 % check the dimension to verify
28 A = rand(4,3);
29 [m,n] = size(A) % put rows in m and columns in n and make an array of 1x2
   containing m and n
30 % instead of spaces, commas can also be used to separate columns
31 size(A) % ans = 4 3 the first number tells # of rows, second tells # of columns
32 % type help eye in command line to get help of eye
33 % type help [command] in command line to get help og that command

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