

```

1  % this is comment
2  % the percent sign is equivalent to // comment as in C++
3  % there are 2 main windows to work with in MATLAB ->
4  % the command window where you can execute single line commands to get direct
   results
5  % the editor window where you can write scripts which run as a complete program
6  % the script file should be saved as a name without any spaces and a dot(.) m
   extension
7  % this is necessary because a script file can also be a function
8  % so in order to call a function from another script file, it should be without
   spaces and special characters
9  % remember how to name a variable or a function in C++?
10
11
12  % run the following lines in command window
13  disp(4+7) % OUTPUT 11 doesn't create a new ans variable
14  % disp() is like cout in C++
15  4+5 % OUTPUT ans = 9 creates a new ans variable
16  who % shows all variables created
17  3**3 % ans = 27 [that is 3 power 3 ]
18  2^3 % ans = 8 [that is 2 power 3]
19  % the variable ans gets updated each time when you didn't specify a var
20  var = 10/3 % var = 3.333
21  % 3.333 should be 9.999 but see the next step
22  result = var * 3 % result = 10 (not 9.999)
23  a = 3.333* 3 % a = 9.999
24  1==2 % ans = 0 (denotes false)
25  b = 1~=2 % b = 1 (denotes true) [ the symbol for not equal is ~= ]
26  % the symbol is not != as in C++
27  c = ans && b % c = 0 (logical AND operation)
28  d = c || b % d = 1 (logical OR operation)
29  e = xor(1,0) % e = 1 (X-OR operation)
30  % type the next line in command line with a semicolon
31  f = pi; % creates a var f and assigns pi value(inbuilt) to it
32  % now type f without semicolon in command line
33  % it will show f = 3.1416
34  disp(f) % shows 3.1416
35  disp(sprintf('%0.2f',f)) % formatting style to 2 decimal places %f is for float
36  name = 'Anomitra' ;
37  age = 20;
38  X = sprintf('%s is %d years sexy boi.',name,age);
39  disp(X) % try yourself
40  %s is for string %d is for integer
41  % clc
42  % the above command clears the command window however it doesn't delete the
   variables
43  % to verify type the command who
44  % clear
45  % the above command deletes the variables
46  % to verify type the command who
47  whos % shows detailed description of all variables in scope
48
49  % MATLAB = MATrix LABoratory
50  A = [1 2 3; 4 5 6 ]
51  % semicolon separates rows
52  % spaces separate columns
53  % A is a 2x3 matrix

```