**Global Variables**

**Global variables can be shared by more than one function.** For this, you need to declare the variable as global in all the functions.

If you want to access that variable from the base workspace, then declare the variable at the command line.

The global declaration must occur before the variable is actually used in a function.

It is a good practice to use capital letters for the names of global variables to distinguish them from other variables.

**Example**

**Let us create a function file named average.m and type the following code in it –**

function avg = average(nums)

global TOTAL

avg = sum(nums)/TOTAL;

end

**Create a script file and type the following code in it −**

global TOTAL;

TOTAL = 10;

n = [34, 45, 25, 45, 33, 19, 40, 34, 38, 42];

av = average(n)

When you run the file, it will display the following result −

av = 35.500

Write a 2 functions :

1. Finding mean of n numbers ( sum of n numbers / total) - funme
2. Finding Sum of (x^2 ) and mean of the sum(x^2) - funsu
3. Script( Main file ) – Vectors and TOTAL