Assignment -8

- 1. Design and code an interactive program that will use functions to enter a matrix of m by n size, compute column averages and row averages and print them. (Note: Your program should work for variable dimensions).
- 2. Initialize two matrices, one of size 5 x 4 and other of size 4 x 5 using the following statement in appropriate place.

```
array[i] = rand()\%10;
```

Compute a third matrix obtained by the multiplication of the two matrices. The output matrix has to be printed from main().

- 3. Write a program that fills the main diagonal of a square matrix with zeros, lower-left triangle with the sum of the corresponding indexes of the elements of the matrix, upper-right triangle as the multiplication of the corresponding indexes of the elements of the matrix.
- 4. Write program that concatenate two strings of size atleast 10. Your program should store the result in a third string. The output string has to be printed from main(). Do not include string.h in your program.
- 5. Write sorts array of strings them in alphabetical order.