

## Assignment 7: Function

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Implement the following C programs using user-defined functions:

- 1) Calculate  $x^y$  i.e pow(x,y) using recursion.
- 2) Reads an  $n \times n$  matrix and displays the sum of elements for the main diagonal.
- 3) Insert a word in a string at a position given by the user.
- 4) Implement a function named as flip; which will take a number as input and flip its last N digits.

For example flip(123, 2)= 132 ; (here N=2)

flip(12345,3)= 12543 (here N=3).

- 5) Write a program in C to find the sum of the series  $1!/1+2!/2+3!/3+4!/4+5!/5$  using the function.
- 6) Write a C program to find out the maximum and minimum of some values using a function which will return an array.