Assignment 7: Function

Implement the following C programs using user-defined functions:

1) Calculate x^y i.e pow(x,y) using recursion.

2) Reads an n x 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) For the flip function in Q-5, verify that flip(flip(N,k), k)= N.