

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 $n \times n$ matrix and displays the sum of elements for the main diagonal.
- 3) Insert a word in a string at a position given by 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`.