

Problem 1 :

Write a C program which reads two numbers n and p from the standard input (Keyboard) and calculate the number of combinations we can make from n if you chose p, and then print it on screen.

$$\binom{n}{p} = \frac{n!}{p!(n-p)!}$$

Comb(n,p) = factorial(n) / ((factorial(p) * (factorial(n-p))))

Sample Input :

Comb(5,2)

Sample Output:

10

Problem 2:

Write a C function which takes a real number x and return the value of e^x

Note that: $e^x = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots$, $-\infty < x < \infty$; The error must be less than 0.001

Sample Input :

e^4

Sample Output:

54.5981500331