Project 1

Write a program that arrays (Taylor series expansion) the function $f(x)$ in a given range with a given number of sub-ranges. The user gives on input the beginning of the range, the end and the number of sub-ranges. You should check at the beginning or tell the user from what range he can give the beginning and end of the range.

The program should display the value of the function from the math library and value estimated in the expansion.

Formula

$$\mathrm{f(x)} = \cos(x)$$

Series

$$x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \cdots$$

Range

$$|\, x \,| < \infty$$

https://en.wikipedia.org/wiki/Taylor_series

Project 2

Count positive elements of two or three digits whose sum of digits is odd.

Int elements should be loaded from the keyboard until the **value** is >= **end**.

end value should be also loaded from the keyboard.

Project 3

Write a program in C that loads an int array A with K columns and W rows and an array B with W columns and K rows by row.

Count the product of the arrays A and B.

The program should multiply matrices of any size.