Solve the following problems with building user defined function in C:

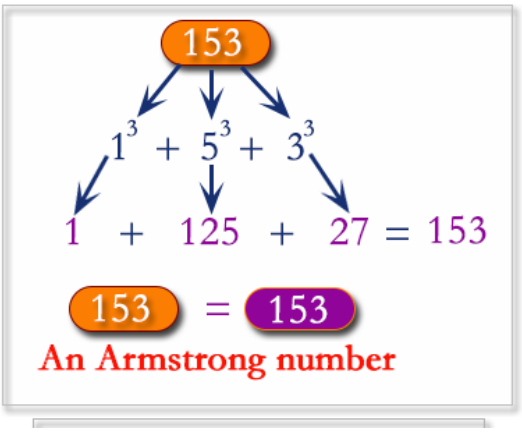
1. Write a C program to calculate the sum of the following series (n will be taken from user):

$$1 + \frac{1}{1!} + \frac{3}{3!} + \frac{5}{5!} + \cdots . + \frac{n}{n!}$$

2. Write a C program that can convert a decimal number to corresponding binary number.

3. Write a C program to get the multiplication result of first n prime numbers from 2 to a given range m. The input m will be taken from user.

4. Write a C program that will tell the user what an Armstrong Number is and the first n Armstrong Number in Number Line. (Input n will be taken from user)




5. Write a C program that will tell the user what a Perfect Number is and will print the first n Perfect Number in Number Line (Input n will be taken from user).