Foundations & Data Structures With C++

Assignment 3 – Programming Fundamentals 2

1. Write a Program to determine if the input number is Armstrong number or not.
2. Program to determine if a number is palindrome or not.
3. Given an integer n, print the number of trailing zeroes in n factorial i.e. n!.
4. Given an integer, replace all the '0' with '5' in the integer.

   E.g. Input : 102
   Output : 152.
5. Print all leap years between 2000 & 3000 (both inclusive).
6. Input consists of n numbers. Print whether those n numbers form an arithmetic progression or not. Examples -
   a. 2 6 10 14 18 22 Output : Yes
   b. 2 6 10 15 19 23 Output : No
7. Given a non negative integer A, print all pair of integers (a, b) such that
   a. a and b are positive integers
   b. a <= b, and
   c. a^2 + b^2 = A.
   d. 0 <= A
8. Print the following pattern. e.g. for n = 5

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1            1
12          21
123        321
1234     4321
1234554321
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