CSA02 C Programming - Cycle-1

1. Compile and Execute the C program to calculate Arithmetic Operators Functions such as Pow(x,n), Add(x,n), Sub(x,n), Mul(x,n), Div(x,n), where x and n are the two operands. Get the input and choice from the user.

Sample Input:

X = 2

N = 4

Choice: 2

Sample Output:

Add(X,N) = 6

2. Compile and Execute the C program to change all the digits of a number to bring the digit at the last position to the first position and vice-versa using loop. Get the input from user.

Sample Input:

Number: 14567

Sample Output:

Reverse Number: 76541

3. Compile and Execute the C program to find the Factorial of a positive integer (number) is the sum of multiplication of all the integers smaller than that positive integer. N! is denoted as factorial of N. For example, factorial of 5 is 5 * 4 * 3 * 2 * 1 which equals to 120.

Sample Input:

N = 5

Sample Output:

120

4. Suppose the number to be check is 6: The user has provided one number that is '6', now we have to think and calculate by which other numbers we can divide '6' and get the remainder as '0'. If the remainder is zero, then we can say that '6' is divisible by that number and we can take this number into consideration to get the sum by using some more other numbers. Compile and execute the above C program.

Sample Input: Given Number: 6 Sample Output:

Its a Perfect Number

5.	A year has 365 days but leap year consists of 366 days. This one day is added in the month of
	February. This month which generally has 28 days and also known as the shortest month in a
	year would get added with an extra day, which gives us a total of 29 days in that month. It is
	based on the Georgian calendar. Compile and Execute the C program for checking out
	whether a given year is a leap year or not.

Sample Input:

Enter Date: 04/11/1947

Sample Output:

Given year is Non Leap Year

6. Ask the user to enter any positive integer. Then divides the given number into individual digits and add those individual (Sum) digits. Compile and execute the c Program and display the output on the screen.

Sample Input:

Enter N value: 3

Enter 3 digit number: 143

Sample Output:

Sum of 3 digit number: 8

7. Write a program to print the all Odd numbers and number of even numbers in between M and N?

Sample Input:

M = 6

N = 15

Sample Output:

All Odd Numbers = 7,9,11,13

All Even Numbers = 8,10,12,14

8. Write a program to find the number of student users in the college, get the total users, staff users details from the client. Note for every 3 staff user there is one Non teaching staff user assigned by default.

Sample Input: Sample Output: Total Users: 856 Student Users: 688

Staff Users: 126