Assignment for Group-A1

Submit on or before 16/02/2021 [Total Marks- 25(Assignment 15 + viva 10]

1. According to the Gregorian calendar, it was Monday on the date 01/01/1900. If any year is input through the keyboard write a program to find out what is the day on 1st January of this year.
2. Write a C program to convert a decimal number into hexa-decimal number where decimal number is input form user.
3. Write a C program to input a character and check that it's a vowel or a consonant.
4. Write a C program to convert a small letter into capital letter and vice versa.
5. print the sum and average of first n odd numbers.
6. to check that given number is prime or not.
7. to input a number and count its even and odd digits and find out their sum separately.
8. If a number 972 is entered through the keyboard, your program should print "Nine Seven Two". Write the program such that it does this for any positive integers.
9. to convert a decimal number to equivalent octal number.
10. Find the sum of the series-
    i. 1 + x2/2! + x4/4! + x6/6! + …….xn/n!
    ii. 1 - x2/2! + x4/4! - x6/6! + …….xn/n!
    iii. x – x3/3! + x5/5! – x7/7! + x9/9! -…….xn/n!
    iv. 1 – 2/21 + 3/31 – 4/41 + 5/51…….
    v. 1 + x2/1! + x4/2! + x6/3! + x8/4! +……..x2n/n!
    vi. 1 - x2/2! + x3/3! – x4/4! + …….xn/n!
    vii. x - x2/3! + x3/5! - x4/7! + x5/9! -…….xn/(2n-1)!
11. to print all the ASCII values and their equivalent characters. The ASCII values vary from 0 to 255.
12. 145 is a special number, since it satisfies the following relation: 145 = 1! + 4! + 5! = 1+24+120 =145. Now Write a programto print all the numbers of this kind between 1 – 10000.
13. WAP to input a number and print its reverse number. Also check that the number is palindrome or not. [if the original number and reverse number is equal then it is palindrome].
14. WAP to print the following series:

i.	1 12 123 1234 12345

ii.	1 22 333 4444 55555
iii.	ABCDE ABCD ABC AB A
iv.	1 121 12321 1234321 123454321
v.	A A B A A B C B A A B C D C B A A B C B A A B A A
vi.	A A B A A B C B A A B C D C B A A B C B A A B A A