ASSIGNMENT-03 (Operators)

1. Enter a 3 digit number and calculate the sum of digits & also display the individual digits.
2. WAP to convert a point in rectangular co-ordinate system to polar co-ordinate system.(use atan(x) is in **math.h**))

   X must be in radian. The conversion is: **radian = degree * (3.14 / 180.0)**
3. WAP to convert a point in polar co-ordinate system to rectangular co-ordinate system.
4. If a 4-digit no is inputted through keyboard, WAP to obtain the sum of the first and last digit of the no.
5. WAP to find the average marks of a student by entering 5 subject marks.
6. WAP to enter the side of a square and calculate the radius of the circle whose area is same as the square.
7. WAP to calculate the gross salary of an employee by giving basic salary as input. Calculate

   DA (60% of Basic), **HRA**(15% of Basic) then calculate **Gross Salary** = **Basic +DA + HRA**
8. WAP to represent the time in hours, minutes and seconds by giving **seconds as input**.
9. WAP to calculate the year, month and days by giving days as input.
10. WAP to represent the distance in meter, centimeter and millimeter by giving **millimeter as input**.

11. WAP to find the smallest among two numbers using conditional operator.
12. WAP to find the largest among two numbers using conditional operator.
13. WAP to find the smallest among three numbers using conditional operator.
14. WAP to find the largest among three numbers using conditional operator.
15. WAP to print the size of each basic data types using **sizeof** operator.
16. WAP to find sum of n consecutive natural numbers where starting no is 1.
17. WAP to find the value of following series : $1^2+2^2+3^2+4^2+5^2+6^2+\ldots\ldots\ldots+n^2$
18. WAP to find the value of following series : $1^3+2^3+3^3+4^3+5^3+6^3+\ldots\ldots\ldots+n^3$

Bitwise operators

19. **WAP to demonstrate the Bitwise operation on given variables x and y.(&, |, ~, <<, >>)**
20. **Write a C program to get nth bit of a number.**
21. **Write a C program to swap two numbers using bitwise operator.**