**Bitwise Operators**

**---------------------------------------------------------------------------------------------------------------**

1**.**  Write a program for the following one.

a) Set a bit b) Clear a bit c) Toggle a bit

2. WAP to find the given number is even or odd using bitwise operators.

3. WAP to find the given number is +ve or -ve using bitwise operators.

4. WAP to swap two numbers using bitwise operators.

5. WAP to find the given number is power of 2 or not.

6. WAP to find the given number is divisible by 8 or not using bitwise operators.

7. Write a program to rotate the bits. Input the no. of rotations, at runtime.

Ex: binary: 10000000000000000000000000001011

Rotations: suppose 3 times right, then

Result : 01110000000000000000000000000001

Binary: 10000000000000000000000000001011

Rotations: suppose 4 times left, then

Result: 00000000000000000000000010111000

8. Convert the characters Upper to Lower and Lower to upper using bitwise

Operators.

9. Write a program to reverse the bits of a given number.

Note: not just reverse printing.

10. Write a one line code to compare two numbers equal or not using bitwise operators.

11. Write a program to print float binary formation using char \*ptr.

12. Write a program to swap the adjacent bytes of a given 4-digit hexadecimal

Number.

Ex: given number = 0x1234;

After swap: 0x3412;

13. Write a program to delete no. of bits from particular position in a given number.

Input the no. of bits, at runtime.

Ex: Suppose num = 100;

It's Binary is 00000000000000000000000001100100

Delete 2 bits from 4th position

Then result is 00000000000000000000000000011100

14. Write a programme for swapping first and last nibbles in a given integer.

Ex: Suppose num = 10

It's Binary is 0000000000000000000000000001010

After swap 1010000000000000000000000000000

15. Write a logic to extract P bits from Posion N in an integer M

16. Write a macro to clear a bit at the position N in an integer M.

17. There are 48 bits stored in an array of character buffer and store them into 2

integer variables.

-------------------------------------------------------- END --------------------------------------------------------

Dear Students, if any mistakes found, kindly inform to me.

A.Tandava Ramakrishna

Email: ramakrishna@vectorindia.org