

Practical April 28

1) WAP called `IntegerSwap` to swap the values of 2 integers taken from the user without using an intermediate variable.

2) WAP called `OddEven` to check whether an integer input by the user is even or odd without using modulo/division operator.

3) WAP called `PowerOfTwo` to check whether the integer entered by the user is a power of 2 or not.

For example, 8 = 1000 = True; 10 = 1010 = False

4) WAP called `SingleOccurrence` to return the element in the array which occurs only once. All the other elements will occur at least twice.

Sample:

Input: `nums = { 4, 1, 2, 9, 1, 4, 2 }`

Output: `9`

5) WAP called `CheckSetBit` which checks if the *i*th bit of a number is set or not.

For example, Input - 10, 3 (Check if the 3rd bit in integer 10 is set or not)

10 → 1010 → True

Note: All the questions are to be done using bitwise operators. (No other approaches)