

Bitwise operations

1. Write a program to perform bitwise AND operation on two integers.
Sample Input: 5, 3

Sample Output: Result of bitwise AND: 1
2. Write a program to perform bitwise OR operation on two integers.
Sample Input: 5, 3

Sample Output: Result of bitwise OR: 7
3. Write a program to perform bitwise XOR operation on two integers.
Sample Input: 5, 3

Sample Output: Result of bitwise XOR: 6
4. Write a program to perform bitwise left shift operation on an integer.
Sample Input: 5, 2

Sample Output: Result of bitwise left shift: 20
5. Write a program to perform bitwise right shift operation on an integer.
Sample Input: 20, 2 Sample Output:

Result of bitwise right shift: 5
6. Write a program to swap two numbers using bitwise XOR operation.
Sample Input: a=5, b=3

Sample Output: After swapping - a=3, b=5
7. Write a program to check if a given number is even or odd using bitwise AND operation.
Sample Input: 6

Sample Output: Even
8. Write a program to set the nth bit of a number using bitwise OR operation.
Sample Input: num=5, n=1

Sample Output: Result after setting nth bit: 7
9. Write a program to clear the nth bit of a number using bitwise AND operation.
Sample Input: num=7, n=1

Sample Output: Result after clearing nth bit: 5

10. Write a program to toggle the nth bit of a number using bitwise XOR operation.

Sample Input: num=5, n=2

Sample Output: Result after toggling nth bit: 1