1

Questions

1. What is the output of XOR operation when applied to two identical binary inputs, such as (1 XOR 1)?

A. 1
B. 0
C. 2
D. 3

2. Which of the following results from executing an XOR operation between any binary input A and the binary number 1, as in A XOR 1?

A. Undefined
B. The same as A
C. The opposite of A
D. Bitwise inversion of A

3. In cryptography, why is XOR used in stream ciphers?

A. To enhance compression efficiency
B. To simplify algorithms
C. To reduce encryption time
D. To efficiently combine plaintext and key stream

4. How does the XOR operation handle the condition (A XOR 0) for any binary input A?

A. The result is A
B. The result is 0
C. The result is undefined
D. The result is 1

5. In data hiding techniques, what is the primary advantage of using XOR encryption?

A. Reversible encryption
B. Increased data size
C. Permanent alteration of data
D. Reduced complexity

6. What is a common use of XOR in data transmission technology?

A. To encrypt transmissions
B. To compress data
C. To generate checksums
D. To amplify signals

7. What happens to a binary number if it is XORed with itself an even number of times?

A. Remains unchanged
B. Value is reduced to zero
C. Combination of original and zero
D. Reverts to original value