

Mock Quiz Coal

Time: 30:00 minutes

Question 3: Coding Questions

- a) Write a subroutine that takes a number as an input and count a '10' pair of bits present in that number.

E.g.: Num: 0XABCD

In binary: 1010101111001101

Output will be 5 because there are 5 '10' pairs are in the binary of ABCD.

- b) Write a subroutine that takes a number as an input and invert or complement every odd number bit in that number. Means the bits located on 1st, 3rd, 5th and up to 15th location should be complemented or inverted.

E.g.: Num: 0XABCD

In binary: 1010101111001101

Output: 0000000101100111

Num in hexadecimal will be: 0x0167