Directions

1. Complete the following questions.

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1. Suppose we obtain the cipher text "jiexrpx" that was obtained using the vigenere cipher with the key "reef". What is the original message?

2. Convert the hexadecimal number 0xb7c4 to the binary representation.

3. Compute 1110 1100 0010 $\oplus$ 1101 1100 1110.

4. What is the result of encrypting the ASCII plaintext "cool!" using the byte-wise XOR shift cipher (where encryption is done using byte-wise XOR) and key 0x30?