WEC-Systems-Cryptography-2023

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Step 1: MD5 Hash

1. Perform MD5 hash of *"hello"*
2. Input String: *hello*
3. Text obtained: *5d41402abc4b2a76b9719d911017c592*

Step 2: XOR Operations

Apply xor operation of *5d41402abc4b2a76b9719d911017c592* with every text in question and concatenate the strings

Output of XOR operation 1: *6b64756576696168657a766775646465*
Output of XOR operation 2: *696c716e676a726879776e66786c7973*
Output XOR operation 3: *346c7176736c75646f657474756272757465*

Concatenate the 3 strings to obtain:
6b64756576696168657a766775646465696c716e676a726879776e66786c7973346c7176736c75646f657474756272757465

Step 3: Convert to ASCII

1. Convert the string to ASCII.
2. Input String: *6b64756576696168657a766775646465696c716e676a726879776e66786c7973346c7176736c75646f657474756272757465*
3. Output String: *kdueviahezvguddeilqngjrhywnfxlys4lqvsludoettubrute*

The hint obtained after deciphering ***ettubrute***

Step 4: Et tu Brute

1. Apply a Caesar decipher technique with shift 3
2. Input String: *kdueviahezvguddeilqngjrhywnfxlys4lqvsludo*
3. Output String: *harbsfxebwsdraabfinkdgoevtkcuivp4inspiral*

The hint obtained after deciphering ***4inspiral***

Step 5: Route Decipher

1. Apply route decipher with a width size of 4.
2. Input String: *harbsfxebwsdraabfinkdgoevtkcuivp4inspiral*
3. Output: *harbkdgsnpofivexfivebutbackwards*

The hint obtained after deciphering ***fivexfivebutbackwards***

Step 6: Polybius Square

1. Apply the "Polybius Square Encryption" Technique
2. Input String: *harbkdgsnpo.*
3. Output String: *43 55 24 54 41 52 44 23 33 31 32*

Step 7: Converting Hexadecimal to ASCII

1. Convert Hexadecimal to ASCII
2. Input String: 43 55 24 54 41 52 44 23 33 31 32
3. Output String: **CU$TARD#312**.