

## LAB ASSIGNMENT 4

1) Write C/C++/Python/JAVA program to implement One Time Pad Encipher for string input. Use the following steps to implement.

### Algorithm

- Plaintext:  
 $P = P_1, P_2, P_3 \dots$
- Ciphertext:  
 $C = C_1, C_2, C_3 \dots$
- Key:  
 $K = k_1, k_2, k_3 \dots$
- Encryption:  
 $C_i = P_i \oplus k_i$
- Decryption:  
 $P_i = C_i \oplus k_i$

**Input:**

**Plaintext:** HELLO

**Key:** XMCKL

2) Write C/C++/Python/JAVA program to implement One Time Pad Encipher for binary input.

**Input:**

**Plaintext:** 110011

**Key:** 101010

**Output:** 011001