#### LAB ASSIGNMENT 2

1) Write C/C++/Python/JAVA program to implement Playfair cipher substitution technique.

# Algorithm:

STEP-1: Read the plain text from the user.

STEP-2: Read the keyword from the user.

STEP-3: Arrange the keyword without duplicates in a 5\*5 matrix in the row order and fill the remaining cells with missed out letters in alphabetical order. Note that 'i' and 'j' takes the same cell.

**STEP-4:** Group the plain text in pairs and match the corresponding corner letters by forming a rectangular grid.

STEP-5: Display the obtained cipher text.

# **Input:**

**Plaintext:** Have a good day

**Key:** CRYPT

## **Expected Output:**

**GBXBGMQWWIEBPW** 

2) Write a C/C++/Python/JAVA program to decrypt a ciphertext using Vigenere substitution technique. Consider following information for decipherment.

Ciphertext: HHWKSWXSLGNTCG

**Key**: PASCAL

## **Expected Output:**

Ciphertext: She is playing