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| Course: | Information Security Laboratory |
| Course Code: | DJ19CEL603 |
| Experiment No.: | 02 |

**AIM:** Study and Implement Vigenere Cipher.

**CODE:**

def generateKey(string, key):

    key = list(key)

    if len(string) == len(key):

        return(key)

    else:

        for i in range(len(string) -

                    len(key)):

            key.append(key[i % len(key)])

    return("" . join(key))

def cipherText(string, key):

    cipher\_text = []

    for i in range(len(string)):

        x = (ord(string[i]) +

            ord(key[i])) % 26

        x += ord('A')

        cipher\_text.append(chr(x))

    return("" . join(cipher\_text))

def originalText(cipher\_text, key):

    orig\_text = []

    for i in range(len(cipher\_text)):

        x = (ord(cipher\_text[i]) -

            ord(key[i]) + 26) % 26

        x += ord('A')

        orig\_text.append(chr(x))

    return("" . join(orig\_text))

if \_\_name\_\_ == "\_\_main\_\_":

    string = input("Enter your message: ")

    keyword = input("Enter key: ")

    key = generateKey(string, keyword)

    cipher\_text = cipherText(string,key)

    print("Ciphertext :", cipher\_text)

    print("Original/Decrypted Text :",

        originalText(cipher\_text, key))

**OUTPUT:**

