EXP NO:3 DATE:

RAIL FENCE CIPHER

Aim: To implement an encryption algorithm using Rail Fence Cipher technique.

Algorithm:

- Step 1: Declare msg and key, initializing msg with the original message, and set key to the desired rail fence key.
- Step 2: Create railMatrix with dimensions [key][msgLen], initializing elements with newline characters.
- Step 3: Iterate through msg, placing characters in railMatrix based on the Rail Fence Cipher pattern, updating row and col.
- Step 4:Print the encrypted message by traversing railMatrix, excluding newline characters.
- Step 5:Return 0 for successful execution and program termination.

Program:

```
#include<stdio.h>
#include<string.h>

void encryptMsg(char msg[], int key){
  int msgLen = strlen(msg), i, j, k = -1, row = 0, col = 0;
  char railMatrix[key][msgLen];

for(i = 0; i < key; ++i)
  for(j = 0; j < msgLen; ++j)
  railMatrix[i][j] = '\n';

for(i = 0; i < msgLen; ++i){
  railMatrix[row][col++] = msg[i];
}</pre>
```

Output:

```
Original Message: This is Vruthi
Encrypted Message: T Vhhsi rtiisu
```

Result: