Expt.No: 3 Roll.No: 210701314

Date:

## **Railfence Cipher**

#### Aim:

To implement encryption of plain text using Railfence Cipher.

## **Algorithm:**

```
Step 1: Get the message from the user.
```

Step 2: Divide the message info into rows.

Step 3: Write diagonally.

Step 4: Read by column & print the result as output.

#### **Program:**

```
s=input("Enter string: ") k=int(input("Enter
key: "))
enc=[[" " for i in range(len(s))] for j in range(k)]
                   for i in
flag=0 row=0
                                   range(len(s)):
                                   flag=0
enc[row][i]=s[i]
                   if row==0:
                                             elif
row==k-1:
  flag=1
if flag==0:
row += 1
else:
  row=1
             for i
in range(k):
   print("".join(enc[i]))
   ct=[] for i in
range(k):
  for j in range(len(s)):
if enc[i][j]!=' ':
```

```
ct.append(enc[i][j])
cipher="".join(ct)
print("Cipher Text: ",cipher)
```

# **Output:**

```
□ X
                                    IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
    Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (
    AMD64)] on win32
    Type "help", "copyright", "credits" or "license()" for more information.
    = RESTART: C:/Users/REC/Desktop/re.py
    Enter string: VIOLENTBEAST
    Enter key: 5
    V
     I
    V
       LN
      OT
       LN
      OT
       LN
    Cipher Text: VEIBAOTSLNTE
>>>
```

**Result:** Thus the encryption of plain text using railfence cipher is implemented.