Ex. No.:1 (c) RAIL-FENCE Reg. No.: 210701266

Date:

AIM:

To implement Rail-Fence Cipher technique using C.

## **ALGORITHM:**

- 1. Get the plaintext string from the user.
- 2. Take the string length of the plaintext.
- 3. For each plaintext character do the following-
- a. If ch % 2 == 0 put in a[] array
- b. Else put in b[] array
- 4. Take each character in a[] array and put in s[] array and increment the index.
- 5. After all characters in a[] array are copied, then copy each character from b[] array and put into s[] array and increment the index.
- 6. Print the contents of s[] array to get ciphertext.

## **PROGRAM CODE:**

```
#include<stdio.h>
#include<string.h>
void main()
int i,j,k=0,l=0,m=0;
char s[20],a[10],b[10];
printf("enter a string:");
scanf("%s",s);
for(i=0;i \le strlen(s);i++)
if(i\%2==0) //even position
a[k]=s[i];
k++;
else //odd position
b[1]=s[i];
1++;
for(i=0;i< k;i++)
printf("%c ",a[i]);
s[m]=a[i];
m++;
```

```
}
printf("\n");
for(i=0;i<1;i++)
{
    printf(" %c",b[i]);
    s[m]=b[i];
    m++;
}
printf("\n\ncipher text is %s",s);
getchar();
}</pre>
```

## **OUTPUT:**

```
[root@localhost-live liveuser]# vi railfence.c
[root@localhost-live liveuser]# cc railfence.c
[root@localhost-live liveuser]# ./a.out
enter a string:queenoftears
q e n f e r
u e o t a s
cipher text is qenferueotas[root@localhost-live liveuser]#
```

## **RESULT:**