Date :

**PRACTICAL-10**

**Objective** – Write a program to implement railfence transposition cipher.

**Code**-

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

char \*plainTextToCipherText(char plainText[], int n)

{

int i, j, counter, limit, index = 0, len;

char \*cipherText;

len = strlen(plainText);

cipherText = (char \*)malloc(sizeof(char) \* (len + 1));

for (i = 0; i < n; i++)

{

counter = 0;

for (j = i; j < len; j += limit)

{

cipherText[index++] = plainText[j];

if (i == 0 || i == n - 1)

limit = 2 \* n - 2;

else if (counter % 2 == 0)

limit = 2 \* (n - i - 1);

else

limit = 2 \* i;

if (limit <= 0)

break;

counter++;

}

}

cipherText[index] = '\0';

return cipherText;

}

int main()

{

int n;

char plainText[100];

printf("Enter the plain text : ");

scanf("%s", plainText);

printf("Enter the value of n : ");

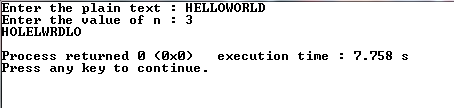
scanf("%d", &n);

printf("%s\n", plainTextToCipherText(plainText, n));

return 0;

}

**Output-**

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