

Question:2 year:2017

Caesar Cipher is an encryption technique which is implemented as ROT13 ('rotate by 13 places'). It is a simple letter substitution cipher that replaces a letter with the letter 13 places after it in the alphabets, with the other characters remaining unchanged.

ROT13

A/a	B/b	C/c	D/d	E/e	F/f	G/g	H/h	I/i	J/j	K/k	L/l	M/m
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
N/n	O/o	P/p	Q/q	R/r	S/s	T/t	U/u	V/v	W/w	X/x	Y/y	Z/z

Write a program to accept a plain text of length L, where L must be greater than 3 and less than 100.

Encrypt the text if valid as per the Caesar Cipher.

Test your program with the sample data and some random data:

Example 1

INPUT : Hello! How are you?

OUTPUT : The cipher text is:
Uryyb? Ubj ner lbh?

Example 2

INPUT : Encryption helps to secure data.

OUTPUT

Rapelegvba urycf gb frpher qngn.

: The

cipher

text

is:

Example 3

INPUT : You

OUTPUT : INVALID LENGTH

Solution:

```
import java.util.*;
class prt_17_str
{
    public static void main()
    {
        Scanner sc=new Scanner(System.in);
        String str,str1="";
        int i,len;
        char ch,ch1;

        System.out.println("Enter a String ");
        str=sc.nextLine();
        len=str.length();
        if(len>3 && len<100)
        {
            // System.out.println("u can procced");
            for(i=0;i<len;i++)
            {
                ch=str.charAt(i);
                if((ch>='A' || ch>='a') && (ch<='M' || ch<='m'))
                {
                    ch=(char)(ch+13);
                    str1=str1+ch;
                }
                else if((ch>='N' || ch>='n') && (ch<='Z' || ch<='z'))
                {
                    ch=(char)(ch-13);
                    str1=str1+ch;
                }
                else
                {
                    str1=str1+ch;
                }
            }
            System.out.println("The cipher text is: "+str1);
        }
        else
        {
            System.out.println("INVALID LENGTH.....");
        }
    }
}
```