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Anudish Jinturkar

H-27

Subject: Network Security (Lab)

Lab1: Implementation of Caesar Cipher for Alphanumeric input

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#include<stdio.h>

#include<string.h>

#include<windows.h>

void main()

{

int key,i,a,key1;

char data[30];

SYSTEMTIME str\_t;

GetSystemTime(&str\_t);

printf("Year:%d\nMonth:%d\nDate:%d\nHour:%d\nMin:%d\nSecond:% d\n",str\_t.wYear,str\_t.wMonth,str\_t.wDay,str\_t.wHour,str\_t.wMinute,str\_t.wSecond);

printf("\nEnter the alphabetical plain text(without any space in between) :\n");

scanf("%s",data); //plain text.

key = str\_t.wSecond;

key1 = str\_t.wSecond;

printf("Actual key:%d\n",key);

if(key>26)

{

key=key % 26; //0<=key<26.

}

if(key1>10)

{

key1=key % 10; //0<=key1<10.

}

printf("Key: %d \nKey1: %d\n",key,key1);

for (i=0;i<strlen(data);i++)

{

if (data[i] >= 'A' && data[i] <= 'Z')

{

data[i] = (char)(((data[i] + key - 'A' + 26) % 26) + 'A');

}

else if (data[i] >= 'a' && data[i] <= 'z')

{

data[i] = (char)(((data[i] + key - 'a' + 26) % 26) + 'a');

}

if(data[i]>='0' && data[i]<='9')

{

data[i]=(((data[i]+ key1 - '0'+ 10)%10)+'0');

}

}

printf("Your cipher text is: %s\n",data); //cipher text.

char op[30];

for(key=0;key<26;key++){

key1=key%10;

for (i=0;i<strlen(data);i++)

{

if (data[i] >= 'A' && data[i] <= 'Z')

{

op[i] = (((data[i] - key - 'A' + 26) % 26) + 'A');

}

else if (data[i] >= 'a' && data[i] <= 'z')

{

op[i] = (((data[i] - key - 'a' + 26) % 26) + 'a');

}

if(data[i]>='0' && data[i]<='9')

{

op[i]=((data[i]- key1 - '0'+ 10)%10+'0');

}

}

op[i]='\0';

printf("Your original text is: %s\n",op); //decryption of cipher text.

}

}

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OUTPUT:

Year:2016

Month:1

Date:29

Hour:9

Min:35

Second: 13

Enter the alphabetical plain text(without any space in between) :

ANUDISH12984567jinturkar

Actual key:13

Key: 13

Key1: 3

Your cipher text is: NAHQVFU45217890wvaghexne

Your original text is: NAHQVFU45217890wvaghexne

Your original text is: MZGPUET34106789vuzfgdwmd

Your original text is: LYFOTDS23095678utyefcvlc

Your original text is: KXENSCR12984567tsxdebukb

Your original text is: JWDMRBQ01873456srwcdatja

Your original text is: IVCLQAP90762345rqvbczsiz

Your original text is: HUBKPZO89651234qpuabyrhy

Your original text is: GTAJOYN78540123potzaxqgx

Your original text is: FSZINXM67439012onsyzwpfw

Your original text is: ERYHMWL56328901nmrxyvoev

Your original text is: DQXGLVK45217890mlqwxundu

Your original text is: CPWFKUJ34106789lkpvwtmct

Your original text is: BOVEJTI23095678kjouvslbs

Your original text is: ANUDISH12984567jinturkar

Your original text is: ZMTCHRG01873456ihmstqjzq

Your original text is: YLSBGQF90762345hglrspiyp

Your original text is: XKRAFPE89651234gfkqrohxo

Your original text is: WJQZEOD78540123fejpqngwn

Your original text is: VIPYDNC67439012ediopmfvm

Your original text is: UHOXCMB56328901dchnoleul

Your original text is: TGNWBLA45217890cbgmnkdtk

Your original text is: SFMVAKZ34106789baflmjcsj

Your original text is: RELUZJY23095678azeklibri

Your original text is: QDKTYIX12984567zydjkhaqh

Your original text is: PCJSXHW01873456yxcijgzpg

Your original text is: OBIRWGV90762345xwbhifyof

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