**hill**

#include<stdio.h>

#include<string.h>

void main()

{

int len,i,j,k;

char plaintext[100];

printf(" enter the word to be encrypted:");

scanf("%s",plaintext);

len=strlen(plaintext);

int matrix[len][len];

printf(" enter matrix of %d by %d \n",len,len);

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

for(j=0;j<len;j++)

scanf("%d",&matrix[i][j]);

int plaintextmatrix[len];

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

plaintextmatrix[i]=plaintext[i]-'a';

int resultmatrix[len];

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

{

resultmatrix[i]=0;

for(j=0;j<len;j++)

resultmatrix[i] += matrix[i][j]\*plaintextmatrix[j];

}

printf("the cipher text is as follows:");

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

{

resultmatrix[i] %=26;

printf("%c",resultmatrix[i]+'a');

}

}