**Experimen No. 02**

* **Substitution cipher:**

#include<stdio.h>

#include<conio.h>

void main()

{

char p[100];

char alphabet[26]={'a','b','c','d','e','f','g','h','i','j','k','l','m',

'n','o','p','q','r','s','t','u','v','w','x','y','z'};

intm,c,k,i,j,len;

clrscr();

/\* printf("Enter key to Encrypt");

scanf("%d",&k); \*/

printf("Enter Text length=>");

scanf("%d",&len);

printf("Enter Plain Text to encrypt=>");

/\* for(i=0;i<=p[i];i++)

length=strlen(p);

printf("The length is:",length);\*/

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

{

scanf("%c",&p[i]);

}

/\*printf("\nAlphabet index value =>");\*/

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

{

for(j=0;j<26;j++)

{

if(p[i]==alphabet[j])

{

printf("\t%d",j);

/\*c=j+k;

printf("addition:%d",c);\*/

}}}

printf("\nEnter key to Encrypt=>");

scanf("%d",&k);

/\*printf("\nAdding alphabet value and key=>");\*/

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

{

for(j=0;j<26;j++)

{

if(p[i]==alphabet[j])

{

c=j+k;

printf("\t%d",c);

}

}

}

printf("\nCipher text is=>\n");

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

{

for(j=0;j<26;j++)

{

if(p[i]==alphabet[j])

{

c=j+k;

m=c%26;

printf("\t%d",m);

/\* m=alphabet[i];

printf("alpha=>%c",alphabet[i]);\*/

}

}

}

printf("\nConvert number to alphabet=>\n");

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

{

for(j=0;j<26;j++)

{

if(p[i]==alphabet[j])

{

c=j+k;

m=c%26;

/\* printf("\t%d",m);\*/

/\* alphabet[j]=m;\*/

/\* printf("\t%d",m);\*/

printf("\t%c",alphabet[m]);

}}}

getch();

}

/\*Output:

Enter Text length=>8

Enter Plain Text to encrypt=>computer

2 14 12 15 20 19 4 17

Enter key to Encrypt=>28

30 42 40 43 48 47 32 45

Cipher text is=>

4 16 14 17 22 21 6 19

Convert number to alphabet=>

e q o r w v g t

\*/