Information Security

Practical-4: Poly alphabetic cipher

CODE:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
int main()
{
   char plain[20] = {'\0'}, ciper[20] = {'\0'}, key[20] = {'\0'}, rt[20] = {'\0'};
   int i,j;

   printf("\n Enter the plain text:");
   scanf("%s",plain);
   printf("\n Enter the key:");
   scanf("%s",key);

   j=0;
   for(i=strlen(key);i<strlen(plain);i++)
         {
         if(j==strlen(key))
               {
```

```
                    j=0;
                }
        key[i]=key[j];
        j++;
        }

     printf("\n--------------------\n");
for(i=0;i<strlen(plain);i++)
{
   ciper[i]=(((plain[i]-97)+(key[i]-97))%26)+97;
}
printf("\n Cipher text is:%s",ciper);

for(i=0;i<strlen(ciper);i++)
{
        if(ciper[i]<key[i])
        {
           rt[i]=26+((ciper[i]-97)-(key[i]-97))+97;
        }
        else
           rt[i]=(((ciper[i]-97)-(key[i]-97))%26)+97;
        }
```

```
  printf("\n \n Plain text is:%s",rt);
  getch();
}
```

Output: