

Information Security

Practical-4: Poly alphabetic cipher

CODE:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
int main()
{
    char plain[20] = {'\0'}, cipher[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))
        {
```

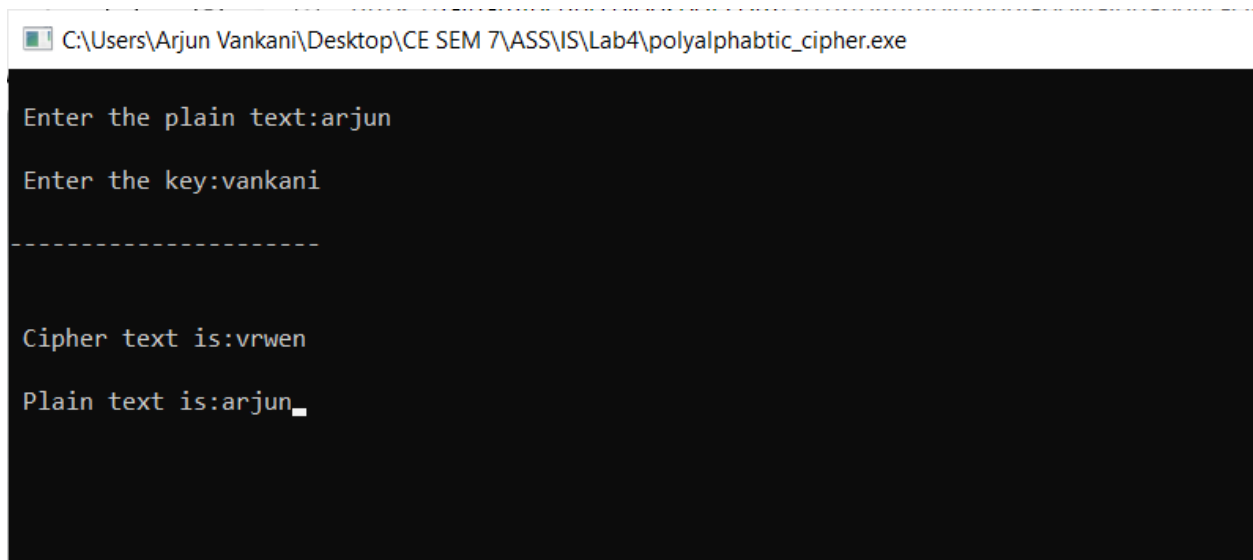
```
        j=0;
    }
    key[i]=key[j];
    j++;
}

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

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

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

Output:



The screenshot shows a Windows command prompt window with the title bar "C:\Users\Arjun Vankani\Desktop\CE SEM 7\ASS\IS\Lab4\polyalphabetic_cipher.exe". The window contains the following text:

```
Enter the plain text:arjun  
Enter the key:vankani  
-----  
Cipher text is:vrwen  
Plain text is:arjun_
```