PRACTICAL -4

Aim: Poly-alphabetic Cipher (Vigener Cipher) Technique.

#include <stdio.h>

#include <string.h>

int main()

{

char pt[20] = {'\0'}, ct[20] = {'\0'}, key[20] = {'\0'}, rt[20] = {'\0'};

printf("Enter the plain text: ");

scanf("%s", pt);

printf("Enter the key: ");

scanf("%s", key);

int j = 0;

for (int i = strlen(key); i < strlen(pt); i++)

{ if (j == strlen(key))

j = 0;

key[i] = key[j];

j++; }

printf("New key is: %s", key);

for (int i = 0; i < strlen(pt); i++) {

ct[i] = (((pt[i] - 97) + (key[i] - 97)) % 26) + 97; }

printf("\nCipher text is: %s", ct);

for (int i = 0; i < strlen(ct); i++)

{

if (ct[i] < key[i])

rt[i] = 26 + ((ct[i] - 97) - (key[i] - 97)) + 97;

else

rt[i] = (((ct[i] - 97) - (key[i] - 97)) % 26) + 97;

}

printf("\nPlain text is: %s", rt);

return 0;

}