EXPERIMENT-2:- Write a C program for monoalphabetic substitution cipher maps a plaintext alphabet to a ciphertextalphabet, so that each letter of the plaintext alphabet maps to a single unique letter of the ciphertext Alphabet.

Program:-

#include <stdio.h>

int main()

{

char text[100];

int key;

printf("Enter plaintext: ");

fgets(text, sizeof(text), stdin);

printf("Enter key: ");

scanf("%d", &key);

for (int i = 0; text[i] != '\0'; i++)

{

if ((text[i] >= 'A' && text[i] <= 'Z') || (text[i] >= 'a' && text[i] <= 'z'))

{

char base = (text[i] >= 'A' && text[i] <= 'Z') ? 'A' : 'a';

text[i] = (text[i] - base + key) % 26 + base;

}

}

printf("Encrypted text: %s", text);

}

Output:-

