#include <stdio.h>

#include <ctype.h>

#include <string.h>

#define SIZE 500

void encrypt(char \*key, char \*words, char \*cipher)

{

int kLen = strlen(key);

int wLen = strlen(words);

int i, j, pos;

for (i = 0; i < wLen; i += kLen )

{

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

{

pos = key[j] - '0' - 1 + i;

if (pos < wLen)

{

sprintf(cipher, "%s%c", cipher, tolower(words[pos]));

}

else

{

sprintf(cipher, "%s ", cipher);

}

}

}

}

void main()

{

char ciphertext[SIZE], key[10], str[SIZE];

FILE \*fp = fopen("plaintext.txt", "r");

FILE \*fp1 = fopen("ciphertext.txt", "w");

if(fp == NULL)

{

printf("File doesnt exist");

}

while(fgets(str, sizeof(str), fp)!=NULL)

{

printf("%s", str);

}

printf("Enter the key:");

gets(key);

encrypt(key, str, ciphertext);

fprintf(fp1, "%s", ciphertext);

fclose(fp);

fclose(fp1);

}