

**CS609-** System Programming **Assignments No-1**

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**QUESTION NO 1:**

#include<iostream>

#include<string.h>

using namespace std;

void encryptyfunc()

{

char text[100];

char temp;

int i, key;

cout <<"Enter a message to encrypt: " <<endl;

cin >>text;

cout <<"Enter key: " <<endl;

cin >> key;

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

temp = text[i];

//If the message to be encypted is in lower case

if(temp >= 'a' && temp <= 'z'){

temp = temp + key;

if(temp > 'z'){

temp = temp - 'z' + 'a' - 1;

}

text[i] = temp;

}

else if(temp >= 'A' && temp <= 'Z'){

temp = temp + key;

if(temp > 'Z'){

temp = temp - 'Z' + 'A' - 1;

}

text[i] = temp;

}

}

cout << "Encrypted message:" << text <<endl;

}

void decryptfunc()

{

char text[100];

char temp;

int i, key;

cout <<"Enter a message to decrypt: " <<endl;

cin >>text;

cout <<"Enter key: " <<endl;

cin >> key;

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

temp = text[i];

if(temp >= 'a' && temp <= 'z'){

temp = temp - key;

if(temp < 'a'){

temp = temp + 'z' - 'a' + 1;

}

text[i] = temp;

}

else if(temp >= 'A' && temp <= 'Z'){

temp = temp - key;

if(temp < 'A'){

temp = temp + 'Z' - 'A' + 1;

}

text[i] = temp;

}

}

cout << "Decrypted message:" <<text << endl;

}

int main()

{

int choice;

cout << "Choose any one !" <<endl;

cout << "1.Encryption"<<endl;

cout << "2.Decryption"<<endl;

cin >> choice;

switch(choice)

{

case 1: encryptyfunc();

break;

case 2: decryptfunc();

break;

default:cout << "Please select valid option";

break;

}

return 0;

}

QUESTION No 2:

SOLUTION:

#include <stdio.h>

#include <stdlib.h>

#include <windows.h>

int main(int argc, char \*argv[])

{

char buff[4096];

DWORD dwBytesRead, dwBytesWritten;

DWORD dwBytesToWrite = (DWORD)strlen(buff);

//open source file and read it

HANDLE source;

// Create a handle for the source file

source=CreateFile(“c:\\myfile1.txt ", GENERIC\_READ, 0, NULL, OPEN\_EXISTING, FILE\_ATTRIBUTE\_NORMAL, NULL);

// Check for errors

if ( source == INVALID\_HANDLE\_VALUE ){

printf("Error, source file not opened.");

exit(EXIT\_FAILURE);

}

else printf("The source file is %s\n", argv[1]);

//create a new file

HANDLE target;

target = CreateFile(" c:\\myfile1.txt ", GENERIC\_WRITE, 0, NULL, CREATE\_ALWAYS, FILE\_ATTRIBUTE\_NORMAL, NULL);

if ( target == INVALID\_HANDLE\_VALUE ){

printf("Error, target file not created.");

exit(EXIT\_FAILURE);

}

else printf("The source file is %s\n", argv[2]);

return 0;

}