**MODIFIED CEASER CIPHER**

#include <iostream>

#include <string>

#include <cstdlib>

#include "macros.h" // a header I made for functions I use allot, here it is only used for Pause() at the end of the program

using namespace std;

char restart;

int nCode;

int main()

{

do

{

if (restart == 'Y'| restart == 'y')

system("clear"); //CLS for a windows machine

cout << "Please enter the code: ";

cin >> nCode;

srand(nCode);

int gap = ((rand() % 4) + 1);

cout << "Please enter your message(Gap=" << gap <<"):\n";

Clear(); // in macros.h

string sString;

getline(cin, sString);

bool bChose;

cout << "\nEnter 0 to decrypt.\nEnter 1 to encrypt.\n";

cin >> bChose;

cout << "\n";

if (bChose == 1)

{

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

{

sString[i] -= gap;

++i;

if (!(i=='\0')) //Because the for loop doesnt check if its the null terninator

sString[i] += gap;

}

}

else

{

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

{

sString[i] += gap;

++i;

if(!(i=='\0'))

sString[i] -= gap;

}

}

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

{

cout << sString[i];

}

cout << "\n";

cout << "\nWould you like to do it again? (y/n): ";

cin >> restart;

}

while (restart == 'y' || restart == 'Y');

Pause(); //all you need to know is that it is in macros.h and waits for the users input(it works)

return 0;

}

**OUTPUT :**

**Key: deF**

**Original file text:**

**This is a secret ring decoder that I found in a cracker jack box!**

**Encrypted file text:**

**Ocdn dn v nzxmzo mdib yzxjyzm ocvo D ajpiy di v xmvxfzm evxf wjs!**

**Note: The decrypted text should be the same as the original file text.**