Caesarian shift (Caesar cipher) is a method used in cryptography where a string message is encrypted by shifting the letters n times. For more information, see [this](https://en.wikipedia.org/wiki/Caesar_cipher) wiki page.

You are given an integer n, which can be positive, negative or zero. Positive values indicate right shifts, and negative values indicate left shifts.

Given a message and n, return message encrypted by the shift n.

**Example**

* For message = "abc" and n = 3, the output should be  
  caesarian(message, n) = "def".

"a", shifted to the right 3 times, becomes"d", "b" becomes "e" and "c" becomes"f".

* For message = "egg" and n = -1, the output should be  
  caesarian(message, n) = "dff".

**Input/Output**

* **[time limit] 3000ms (cs)**
* **[input] string message**

The message to be encrypted.

*Constraints:*  
0 ≤ message.length ≤ 500.

* **[input] integer n**

The shift value.

*Constraints:*  
-2 · 109 ≤ n ≤ 2 · 109.

* **[output] string**

Encrypted message.

<https://codefights.com/challenge/Nx88Ei5vnfib8SKD6/main>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static string caesarian(string message, int n)

{

string alfab = "abcdefghijklmnopqrstuvwxyzabcdefghijklmnopqrstuvwxyz";

string ans = "";

if (n > 0)

{

n = n % 26;

for (int i = 0; i < message.Length; i++)

{

// ans += (alfab.IndexOf(text[i]) + shift).ToString().ToUpper();

//ans += alfab[ text.IndexOf(i)+shift];

if (char.IsLetter(message[i]))

{

int indalfab = alfab.IndexOf(message[i]);

ans += alfab[indalfab + n].ToString();

}

else

{

ans += message[i];

}

}

}

else if (n == 0)

{

return message;

}

else

{

n \*= -1;

if (n > 26)

{

n = n % 26;

}

n \*= -1;

for (int i = 0; i < message.Length; i++)

{

// ans += (alfab.IndexOf(text[i]) + shift).ToString().ToUpper();

//ans += alfab[ text.IndexOf(i)+shift];

if (char.IsLetter(message[i]))

{

int indalfab = alfab.LastIndexOf(message[i]);

ans += alfab[indalfab + n].ToString();

}

else

{

ans += message[i];

}

}

}

//Console.WriteLine(ans);

return ans;

}

static void Main(string[] args)

{

string message = "egg";

int n = -5000;

Console.WriteLine( caesarian(message, n) );

Console.ReadLine();

}

}

}