import java.util.\*; // Program to make encryption with user defined shift position

public class Encryption\_Shift // Class Name

{

static Scanner sc = new Scanner(System.in); // Scanner Class

String str,str2;

char ch; // Data member

int s;

public Encryption\_Shift() { //Default Constructor

s = 0;

str=str2="";

ch='\u0000';

}

public void input() { // Member Function for taking input

System.out.println("Enter the coded text: ");

str = sc.nextLine();

System.out.println("Enter the shift value: ");

s = sc.nextInt();

}

public String encrypt() { // Member Function to encrypt message

int i,l,a; // local Variable

if((s<1) || (s>26)) {

System.out.println("Invalid Shift Value");

} else {

l = str.length();

for(i=0;i<l;i++) {

ch = str.charAt(i);

a = (int)ch + (s-1);

if((char)a=='Q') {

if(str.charAt(i+1)+(s-1)=='Q'&& i<l) {

a = 32;

i++;

}

}

if(a>90) {

a = a - 26;

}

str2 = str2 + (char)a;

}

}

return str2; // Returning the encoded text

}

public void show(String sr) { // Member Function to show the encoded text.

System.out.println("Decoded text: "+sr);

}

public static void main() {

Encryption\_Shift ob = new Encryption\_Shift();

ob.input(); // Member Function Call using object

String sr = ob.encrypt();

ob.show(sr);

}

}