# Problem A.

| | |
|---|---|
| Input file: | standard input |
| Output file: | standard output |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

Today, Bekzat needs to hand over the project. Since the project is large, and he does not have time to do it at all, he divided the project into parts and asked for help from friends. Bekzat gave you a task where you need to draw a rectangle of size n by m. Look below for example.

## Input

Only line of input contains 2 numbers n and m ($3<= n$, $m <= 100$) size of rectangle

## Output

Draw a square in n lines, where each line contains m characters: plus '+' for corners, minus '-' (for upper and lower bounds), forward slash '|' (for left and right bounds) , space ' ' (for inner side) characters

## Examples

| standard input | standard output |
|---|---|
| 3 3 | `+-+`<br>`\| \|`<br>`+-+` |
| 4 10 | `+--------+`<br>`\|        \|`<br>`\|        \|`<br>`+--------+` |

# Problem B. define Fibonacci

| | |
|---|---|
| Input file: | standard input |
| Output file: | standard output |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

You are given one int number. You have to find is this number fibonacci number or not? Fibonacci is ->
0, 1, 1, 2, 3, 5, 8, 13...

## Input

The first line contains one integer n ($-10^8 <= n <= 10^8$)

## Output

"YES"if this number fibonacci number. Else "NO".

## Examples

| standard input | standard output |
|---|---|
| 5 | YES |
| 9 | NO |
| -1 | NO |
| 13 | YES |

# Problem C. Good Palindrome

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

A palindrome is a word which reads the same backward as forward, such as madam or racecar. The string called as a good palindrome if its size is even and the string is a palindrome.

For example, "aba"is palindrome, but not good palindrome, "abab"is not Palindrome, and "abaaba"is good palindrome.

## Input

Single line, string `s` .

## Output

Print "NotGoodPalindrome if it is not a good palindrome. (without whitespaces) Print "NotPalindrome if it is not a palindrome.(without whitespaces) Print "GoodPalindrome if it is a good palindrome.(without whitespaces)

## Examples

| standard input | standard output |
|---|---|
| aba | NotGoodPalindrome |
| abaa | NotPalindrome |
| ababbaba | GoodPalindrome |
| asdasd | NotPalindrome |
| abaabazxyyxzabaaba | GoodPalindrome |

# Problem D. Changing a characters

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

You are given a string `S` of length `N`, consisting of uppercase English letters, and an integers `L` and `R` which are between `1` and `N` (inclusive). Print the string S after lowercasing characters between L and R.

## Input

First line of input contains string `S` ($1 <= S.size() <= 50$)

Second line contains two integers `L` and `R` ($1 <= L <= R <= S.size()$)

## Output

Print the string `S` after lowercasing the characters from L-th to R-th.

## Examples

| standard input | standard output |
|---|---|
| QWERTY<br>2 5 | QwertY |
| A<br>1 1 | a |

# Problem E. Trees After Wind

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

You have n - number of trees, each tree has number of leaves. Once a day, weather was very windy, so some leaves felt down. You are given n trees and number of leaves before and after the wind. Your task is to find maximum number of leaves left on some tree.

## Input

First line integer number n;

Second line is an array of leaves that was initially on i'th tree.

Third line is an array of leaves left down from i'th tree. The number of leaves felt down is less or equals initial number.

## Output

Output maximum number of leaves left on tree.

## Examples

| standard input | standard output |
|---|---|
| 5<br>10 20 30 40 50<br>5 13 23 34 14 | 36 |
| 3<br>1 2 3<br>1 2 3 | 0 |
| 12<br>34 14 5 65 123 22 141 567 563 188 87 21<br>21 2 0 31 123 21 100 1 1 22 33 4 | 566 |
| 1<br>7<br>2 | 5 |

# Problem F. Recursion

| | |
|---|---|
| Input file: | standard input |
| Output file: | standard output |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

Rahat thinks that 4 and 7 are lucky numbers. You are given integer number n. Please print all lucky numbers that are less or equal to number n.

## Input

You have given one integer number n. ($4<=n<= 100000$)

## Output

Print all lucky numbers by ascending order.

## Examples

| standard input | standard output |
|---|---|
| 100 | 4<br>7<br>44<br>47<br>74<br>77 |
| 1000 | 4<br>7<br>44<br>47<br>74<br>77<br>444<br>447<br>474<br>477<br>744<br>747<br>774<br>777 |

# Problem G. Again, Game with indexes

| | |
|---|---|
| Input file: | standard input |
| Output file: | standard output |
| Time limit: | 1 second |
| Memory limit: | 256 megabytes |

Your task is to numerate the sides of 2D array in increasing order, from left to right, from upper to down and remember to put whitespaces inside of the resultant box.

## Input

Single integer n , the sides of 2D array : n x n .

## Output

Two dimensional array.

## Examples

| standard input | standard output |
|---|---|
| 5 | 01234<br>1    5<br>2    6<br>3    7<br>45678 |
| 3 | 012<br>1 3<br>234 |
| 1 | 0 |
| 10 | 0123456789<br>1        10<br>2        11<br>3        12<br>4        13<br>5        14<br>6        15<br>7        16<br>8        17<br>9101112131415161718 |