

1. Reverse Game

Problem Description

Write a program that accepts **T** numbers(**N**) from the user and find reverse of the given number(**N**).

Problem Constraints

$1 \leq T \leq 100$

$1 \leq N \leq 100000000$

Input Format

First line is **T** which means number of test cases.

Each next N lines contain an integer **N**.

Output Format

T lines each containing reverse of the input integer.

Example Input

Input 1:

2
101
105

Input 2:

1
100

Example Output

Output 1:

101
501

Output 2:

1

Example Explanation

Explanation 1:

`Reverse(101)=101`

`Reverse(105)=501`

Explanation 2:

`Reverse(100)=001=1`

2. Palindromic Integer

Problem Description

Take an integer **A** as input, determine whether it is palindromic or not.

A palindrome integer is an integer **X** for which **reverse(X) = X** where **reverse(X)** is **X** with its digits reversed. For e.g., reverse(123) = 321. **Note** : There will be **no** zeros at the start of a number.

Problem Constraints

$1 \leq A \leq 10^6$

Input Format

First and the only line contains a single integer **A**.

Output Format

Print **Yes** if it is palindromic, else print **No**.

Example Input

Input 1:

120

Input 2:

1001

Input 3:

131

Example Output

Output 1:

No

Output 2:

Yes

Output 3:

Yes

Example Explanation

Explanation 1:

For $A = 120$, $\text{reverse}(A) = \text{reverse}(120) = 021 = 21$ (removing leading zeroes). 120 is not equal to 21

Explanation 2:

For $A = 1001$, $\text{reverse}(A) = \text{reverse}(1001) = 1001$, which is same as A .

Explanation 3:

For $A = 131$, $\text{reverse}(A) = \text{reverse}(131) = 131$, which is same as A .

3. For loop-2 MCQ

A Highest Common Factor (HCF) of a,b is defined as _____.

Choose one from below:

- A. It is the smallest integer divisible by both a and b
- B. It is the greatest integer divisor of both a and b
- C. It is the sum of the number a and b
- D. None of the above

4. HCF using Loop

Problem Description

Write a program to input an integer **T** which represents the number of test cases. For each test case input two integers **A** and **B** in two different lines. For each pair of A and B print the HCF of the given two numbers.

Problem Constraints

$1 \leq T \leq 1000$

$1 \leq A, B \leq 1000000$

Input Format

The first line of input contains **T** which means number of test cases.

Next **2T** lines contains input **A** and **B** for each testcase.

First line of each testcase contain an integer **A** and second line of the testcase contains input **B**.

Output Format

T lines each containing an integer representing HCF of A & B.

Example Input

Input 1:

```
2
15
105
24
36
```

Example Output

Output 1:

```
15
12
```

5. Least Common Multiple (Asked in- SAP Labs)

Problem Description

Write a program to input an integer T and then for each test case input two integers A and B in two different lines and then print T lines containing Least Common Multiple (LCM) of two given 2 numbers A and B.

LCM of two integers is the smallest positive integer divisible by both.

Problem Constraints

$1 \leq T \leq 1000$

$1 \leq A, B \leq 1000$

Input Format

The first line contains T which means number of test cases.

Next 2T lines contains input A and B for each testcase.

First line of each testcase contain an integer A and second line of the testcase contains input B.

Output Format

T lines each containing an integer representing LCM of A & B.

Example Input

Input 1:

3

2

3

9

6

2

6

Example Output

Output 1:

6

18

6

Example Explanation

Explanation:

In first testcase 6 is the smallest positive integer which is divisible by both 2 ($2 * 3 = 6$) and 3 ($3 * 2 = 6$).

In second testcase 18 is the smallest positive integer which is divisible by both 9 ($9 * 2 = 18$) and 6 ($6 * 3 = 18$).

In third testcase 6 is the smallest positive integer which is divisible by both 2 ($2 * 3 = 6$) and 6 ($6 * 1 = 6$).