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Sum of palindromic numbers

| Problem Code: SPALNUM

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A number is called *palindromic* if its decimal representation is a palindrome. You are given a range, described by a pair of integers **L** and **R**. Find the sum of all palindromic numbers lying in the range **[L, R]**, inclusive of both the extrema.

Input

The first line of the input contains an integer **T** denoting the number of test cases. The description of **T** test cases follows.

The first line of each test case contains a pair of space separated integers **L** and **R** denoting the range for which you are required to find the sum of the palindromic numbers.

Output

For each test case, output a single line containing the sum of all the palindromic numbers in the given range.

Constraints

- $1 \leq T \leq 100$
- Subtask 1 (34 points) : $1 \leq L \leq R \leq 10^3$
- Subtask 2 (66 points) : $1 \leq L \leq R \leq 10^5$

Example

Input :
2
1 10
123 150

Output :
45
272

Explanation

Example case 1. The palindromic numbers between **1** and **10** are all numbers except the number **10**. Their sum is 45.

Example case 2. The palindromic numbers between **123** and **150** are **131** and **141** and their sum is **272**.

All submissions for this problem are available.

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