

ACPC got TALENT

Input file: `nicole.in`
Output file: `stdout`
Time limit: 15 seconds
Memory limit: 1024 megabytes

Nicole Hosh is a member in the media core team in the ACPC from Syria. Since she is very keen to make the ACPC one of the most enjoyable events for the contestants, she decided to make a big surprise for the ACPC contestants this year. Lots of our contestants have many hidden talents, and this year she wanted them to share what they have at the ACPC got TALENT event during the regional.

One of the contestants had a very strange talent. Given two numbers A and B , he can compute the sum of the weights of the numbers between and including A and B . The weight of a number is the sum of its unique digits. Can you help Nicole by writing a program to verify that he is answering correctly to their queries?

Input

The input starts with T the number of test case ($1 \leq T \leq 100$), then follows T lines each containing a query of 2 numbers A and B ($1 \leq A \leq B \leq 10^{15}$).

Output

The output should follow this format:

Case x: y

x is the test case number starting from 1.

y is the answer to the query.

Print a new line after each test case.

Examples

<code>nicole.in</code>	<code>stdout</code>
5	Case 1: 2
22 22	Case 2: 46
1 10	Case 3: 5
20 21	Case 4: 6738
73 675	Case 5: 3421327069276318
875123 98613629346773	