Problem D. Largest Digit

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

Let $f(x)$ be the largest digit in the decimal representation of a positive integer x. For example, $f(4523) = 5$ and $f(1001) = 1$.

Given four positive integers l_a, r_a, l_b and r_b such that $l_a \le r_a$ and $l_b \le r_b$, calculate the maximum value of $f(a + b)$, where $l_a \le a \le r_a$ and $l_b \le b \le r_b$.

Input

There are multiple test cases. The first line of the input contains an integer T ($1 \le T \le 10^3$) indicating the number of test cases. For each test case:

The first and only line contains four integers l_a, r_a, l_b and r_b ($1 \le l_a \le r_a \le 10^9$, $1 \le l_b \le r_b \le 10^9$).

Output

For each test case output one line containing one integer indicating the maximum value of $f(a + b)$.

Example

standard input	standard output
2 178 182 83 85 2 5 3 6	7 9

Note

For the first sample test case, the answer is $f(182 + 85) = f(267) = 7$.

For the second sample test case, the answer is $f(4 + 5) = f(9) = 9$.