

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 $l_a \leq r_a$ and $l_b \leq r_b$, calculate the maximum value of $f(a + b)$, where $l_a \leq a \leq r_a$ and $l_b \leq b \leq r_b$.

Input

There are multiple test cases. The first line of the input contains an integer T ($1 \leq T \leq 10^3$) 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 ($1 \leq l_a \leq r_a \leq 10^9$, $1 \leq l_b \leq r_b \leq 10^9$).

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 $f(4 + 5) = f(9) = 9$.