Nth greater value

For this problem, you will write a program that prints the Nth largest value in a fixed sized array of

integers. To make things simple, N will be 3 and the array will always be have 10 decimal integer

values.

Input

The first line of input contains a single integer P, (1 ≤ P ≤ 1000), which is the number of data sets that

follow. Each data set consists of a single line containing the data set number, followed by a space,

followed by 10 space separated decimal integers whose values are between 1 and 1000 inclusive.

Output

For each data set, generate one line of output with the following values: The data set number as a

decimal integer, a space, and the 3rd largest value of the corresponding 10 integers.

Example

Input:
4
1 1 2 3 4 5 6 7 8 9 1000
2 338 304 619 95 343 496 489 116 98 127
3 931 240 986 894 826 640 965 833 136 138
4 940 955 364 188 133 254 501 122 768 408

Output:
1 8

2 489
3 931
4 768