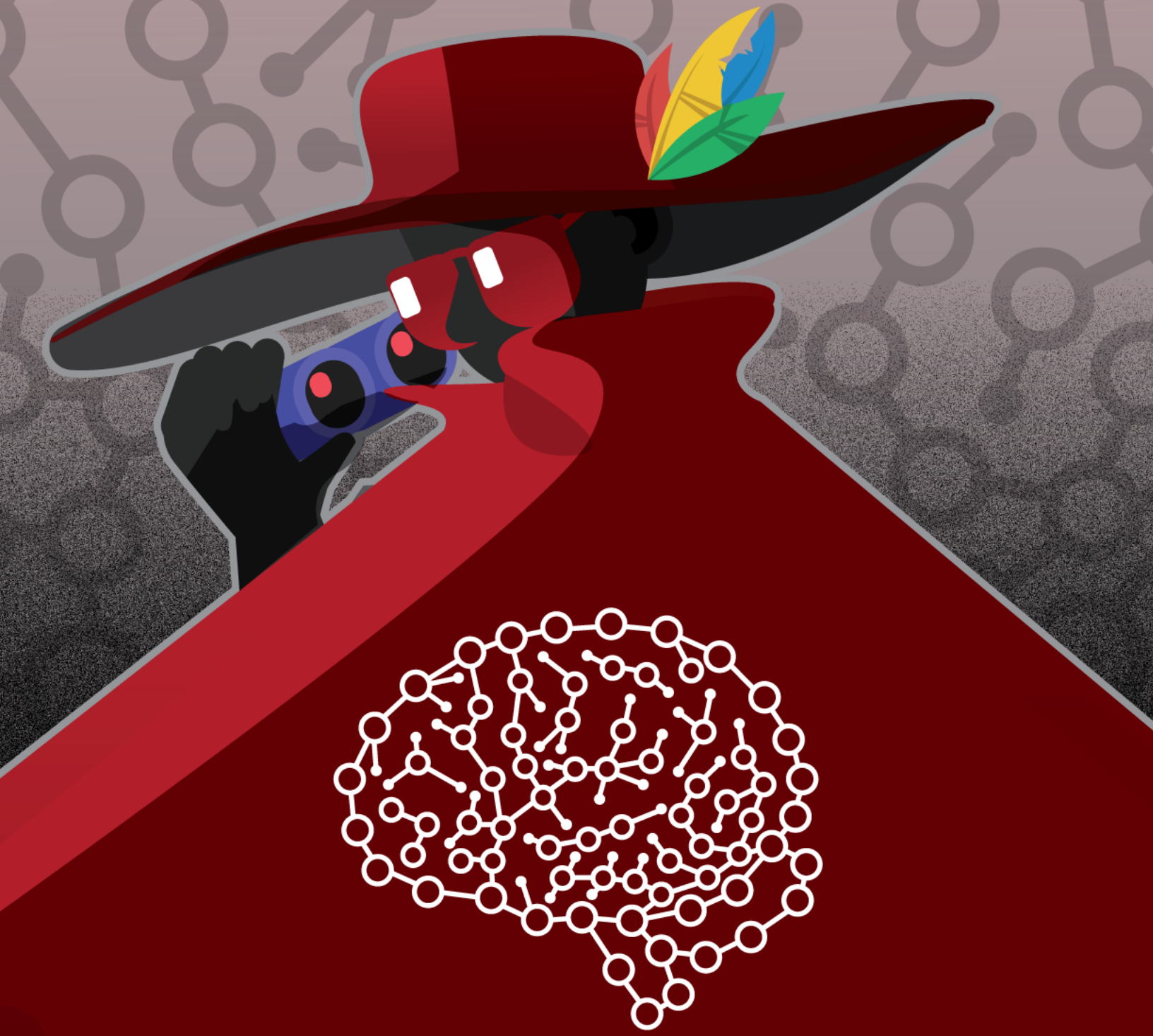
in partnership with



ALGOLYMPICS 2020

02.22.2020

Sample Problem: Santa's List

Time Limit: 3 seconds

Kids always write their names in whatever combination of cases they feel since they don't know how capital letters work yet. For example, Adonis might write his name as aDoNiS or Adonis, etc. This is a nightmare for the secretaries for Santa's list since they want to sort their files truly alphabetically. In particular, a name like Cobert will come before Cubert, irregardless of the cases of the letters. In case you have forgotten the alphabet, let us sing it together:

A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. Now I know my ABCs next time won't you sing with me.

Let m and n be two names the secretary finds. Determine which one of the two names is first alphabetically. If they are the same name, then output `SAME!`.

Input

The first line of input contains a single integer t, where $1 \leq t \leq 1000$.

The first line of each test case contains a single string, m. The second line of each test case contains a single string, n.

Strings consist of English letters only, and the length of each string is between 1 and 100, inclusive.

Output

For each test case, print a single line containing which one of the two names is first alphabetically, or if they are the same name, the string "`SAME!`" (without the quotes).

Sample Input	Sample Output
3 maRk Yarm AlleN NellA may May	maRk Allen SAME!