

Sportsbar (350 points)

Introduction

There's a new sports bar on campus and we're having trouble figuring out how many TVs we need to order to make sure we can show everyone's favorite sporting events at the same time. We need your help figuring out how many TVs to order. We'll give you the schedule of sporting events for the year. Please help us figure out how many TVs we need to order given this schedule.

Input Specifications

The first line will be an integer $1 \le N \le 7000$. This will be followed by that many lines of sporting events, each of which is formatted as Event-Name|StartTime|EndTime. Note that event times are represented as a single integer, and that event names will not have spaces.

Note that we do not need separate TVs for events that end and start at the exact same time.

Output Specifications

Based on the input, print out a single integer: the number of TVs we'll need in our bar.

Sample Input/Output

Input

3 Red-Blue|1|4 Green-Yellow|3|7 Purple-Orange|6|10

Output

2

Explanation

Green vs Yellow overlaps with both Red vs Blue & Purple vs Orange, but at different times, so the max number of TVs needed is 2.

Input

5
Knicks-Raptors|1472412600|1472421600
Yankees-BlueJays|1472407200|1472414400
Arsinal-Chelsea|1472389200|1472400000
Mets-Nationals|1472403900|1472412900
Rays-RedSox|1472427300|1472436000

Output

Explanation

Knicks-Raptors, Yankees-BlueJays, and Mets-Nationals are all live at the same time, so we'll need 3 tvs to make sure they can be viewed simultaneously