ECE30018 Problem Solving Studio, Fall 2023

C3. Job Interview

| Submission due: 1:00 PM, 22 Sep Fri

Job Interview

A company is hiring new software developers. For N applicants, application reviews and programming tests were already made, and the score of an applicant P_i is determined as a pair of positive integers (x_i, y_i) where x_i is the application review score and y_i is the programming test score.

To arrange their job interviews, you are asked to group these N applicants according to the following rules:

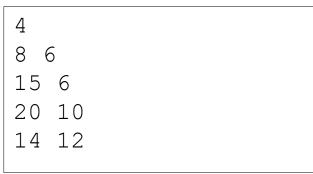
- 1. Two applicants P_i and P_j must belong to a same group if (1) $x_i < x_j$ and $y_i > y_j$, or (2) $x_i > x_j$ and $y_i < y_j$, and
- 2. Groups must be formed as many as possible

Write a program that determines the maximum number of possible applicant groups for given scores

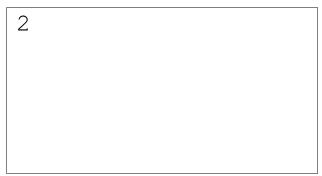
Requirements

- **Input**: Input is given as text via the standard input. The first line has one integers N for $1 \le N \le 8000$. From the second to the (N+1)-th lines, each line has two integers x_i and y_i for $0 \le x_i \le 1000000$ and $0 \le y_i \le 1000000$.
- Output: Print the maximum number of possible interview groups. Your program should return the answer within 0.5 second.
- Test case example

Input



Output



C3 Teams

Team No.	Members
301	소병찬, 이원빈
302	이준명, 최혜림
303	박세찬, 이신원
304	최소미, 백건하
305	백하현, 최정겸
306	전혜림, 강하림
307	나보림, 유건민
308	박민지, 오인혁