In recent ACM ICPC World Finals (2015), there were 13 problems and each of those were solved by at least one team. Well, we will not discuss about how it happened or who did that.

In this contest, SIUPC'2015, we are expecting to have at most 128 teams onsite. Three cheers for you for becoming one of the participating teams!

Now, we will discuss what we wanted to prepare for you. From the World Finals 2015, we are just inspired to have a set of 13 problems each of which can be solved by at least one participating team.

Luckily, we have come to know about an artificial intelligence system named "PAUL". Given a set of problems, for each individual problem, it can foretell the number of teams that are going to solve that problem.

Now, we need your help. We are going to give you the predictions of PAUL for some problemsets. For each of the problemsets (with 13 problems), we request you to tell us whether we can consider the set so that each problem from that set can be solved by at least one team.

Input

First line of input consists of an integer $S \ (\leq 23)$, the number of problemsets with 13 problems. Each of next S lines consists of 13 space separated integers, the predicted number of teams to solve each problem.

Output

For each problem set, output a line formatted as 'Set #N: Ans'. Here N is an integer which is the serial number of set. And Ans is your answer which is either 'Yes' or 'No' (without quotes).

Sample Input

2 128 64 48 32 24 16 12 8 6 4 3 2 1 128 64 48 32 24 16 12 8 6 4 2 1 0

Sample Output

Set #1: Yes Set #2: No