Kapil and Deepak are planning for the Engineer's day celebration at Graphic Era Hill University. Kapil have an idea for the design of the banner for the TechGeeks club. He wants the banner to be different and triangular in shape. Whereas Deepak wants banner to be in regtangular shape. Eventually they came up with a plan that, they will ask 'N' number of students to vote for the shape of banner and the shape with maximum votes will be the shape of banner. The students always vote the shapes 'Rectangle' and 'Triangle' alternatively. If first student always votes for 'Rectangle', you have to figure out the shape of banner.

Input

First line will be integer T, number of test cases Then T space separated integers N, number of students

Output

A string 'rectangle' or 'triangle' for each test case on newline.

lowercase

Sample Case:

Input:

2

5 11

Output:

rectangle rectangle

After Kapil and Deepak have decided the design of the banner, they started looking for the volunteers for the planning of the 'Appathon' event. A student can be a volunteer if he/she is from either BCA or BTech and he/she must not be in their freshman year.

Help them figure out how many volunteers they can find?

There are three courses BBA, BCA and BTech coded as 1, 2, and 3 respectively.

The student would be a structure:

```
typedef struct{
    int course;
    int semester;
}Student;
```

Input

First line will be integer T, number of test cases Then T lines with two space separated integers \mathbf{c} and \mathbf{s} on each line.

c, course of the student

s, semester of the student

Output

An integer telling how many volunteers they can get.

Sample Case:

Input:

7

1 3

2 5

2 1

1 3

3 2

1 3

2 2

Output:

1