Problem D. PAGODAS
Time Limit: 1 second

Problem Description

n pagodas were standing erect in Hong Jue Si between the Niushou Mountain and the Yuntai Mountain, labelled from 1 to n. However, only two of them (labelled a and b, where $1 \leq a \neq b \leq n$) withstood the test of time.

Two monks, Yuwgna and Iaka, decide to make glories great again. They take turns to build pagodas and Yuwgna takes first. For each turn, one can rebuild a new pagodas labelled i ($i \notin \{a, b\}$ *and* $1 \leq i \leq n$) if there exist two pagodas standing erect, labelled j and k respectively, such that $i = j + k$ or $i = j - k$. Each pagoda can not be rebuilt twice.

This is a game for them. The monk who can not rebuild a new pagoda will lose the game.

Input

The first line contains an integer t ($1 \leq t \leq 500$) which is the number of test cases. For each test case, the first line provides the positive integer n ($2 \leq n \leq 20000$) and two different integers a and b.

Output

For each test case, output the winner ("Yuwgna" or "Iaka"). Both of them will make the best possible decision each time.

Sample Input

```
16
2 1 2
3 1 3
67 1 2
100 1 2
8 6 8
9 6 8
10 6 8
11 6 8
```

```
12 6 8
13 6 8
14 6 8
15 6 8
16 6 8
1314 6 8
1994 1 13
1994 7 12
```

Sample Output

```
Case #1: Iaka
Case #2: Yuwgna
Case #3: Yuwgna
Case #4: Iaka
Case #5: Iaka
Case #6: Iaka
Case #7: Yuwgna
Case #8: Yuwgna
Case #9: Iaka
Case #10: Iaka
Case #11: Yuwgna
Case #12: Yuwgna
Case #13: Iaka
Case #14: Yuwgna
Case #15: Iaka
Case #16: Iaka
```