PW - B // I'll Clap You At The Track Meet

After Zhehai got exposed by Anish for playing so much Minecraft, Zhehai's nonexistent gaming life has been dark and lonely. Doctor Patel suggests that in order for Zhehai to become happy again, he needs to face the barriers limiting his potential: which would be Anish Aggarwal, the one that sued him in court.

Zhehai knows that Anish is participating in a track meet in a month, so Zhehai intends to beat him. Throughout the next month, Zhehai faces a series of events that boost or lower his time, and Anish also faces a series of events that boost or lower his time. Given their track times and events, determine who wins at the track meet.

Input Specification:

The first line will contain the number A (10 <= A <= 100), Anish's 100m track time.

The second line will contain the number Z (10<=Z<=100), Zhehai's 100m track time.

The third line will contain the number N (1<=N<=10000), where the next N lines will contain an event that will affect Anish or Zhehai's time.

The format of the next N lines is:

[name] [positive means decrease in time, negative means increase in time, as a percentage]

Output Specification:

Output the name of the person who will win the race. If it's a tie, output TIE

Sample Input:

12

12

2

Zhehai -25

Anish 25

Sample Output:

Anish

Explanation: 12 x 125% gives 15 for Zhehai's time. 12 x 75% gives 9 for Anish's time.

Sample Input:

8

16

2

Zhehai 75

Anish 50

Sample Output:

TIE