

Speeding Takes its Toll

Program Name: speed.java Input File: speed.in

A man receives a toll booth ticket as he drives onto a toll road. Two hours later, he hands the ticket to the toll booth operator as he exits the toll road. She examines the timestamp on the toll booth ticket and, knowing how far the man traveled, promptly issues him a speeding ticket. She explains to the man: “Sir, the speed limit on this toll road is 55 miles per hour. Since you traveled 120 miles in two hours, I can prove mathematically that at some point during your trip, you were going faster than 55 miles per hour. How do I do this? Your average speed is 60mph, which is greater than 55 miles per hour.”

Given this information for other drivers, determine if they deserve speeding tickets as well.

Input

The first line will contain a single integer n indicating the number of drivers on the toll road. Each of the next n lines will contain a positive integer representing the distance in miles that the driver traveled and a positive integer representing how many hours it took the driver to travel that far.

Output

For each driver, display the string “SPEEDING TICKET” if the driver’s average speed is more than the toll road’s posted speed limit, 55 miles per hour. If the driver’s average speed is equal to or less than 55 miles per hour, display the string “NO SPEEDING TICKET”.

Example Input File

```
4
120 2
190 3
55 1
200 5
```

Example Output To Screen

```
SPEEDING TICKET
SPEEDING TICKET
NO SPEEDING TICKET
NO SPEEDING TICKET
```