

# BATMAN4

" Batman: *A hero can be anyone. Even a man doing something as simple and reassuring as putting a coat around a little boy's shoulder to let him know that the world hadn't ended.* "

THE BOMB IS TRIGGERED !! , IT WOULD BLOW OFF IN A FEW MINUTES !!

BATMAN resorts to his BAT and decides to head towards the ocean with the bomb .

However in front of him lies a huge grid of tall buildings . Starting from the top-leftmost grid he needs to move to the bottom right-most grid to reach the ocean . Since the fuel of BAT has nearly exhausted , BATMAN decides to chose a path where the maximum up distance travelled at a time is minimized . However , each movement of the BAT up or down the building takes one unit of time . (Horizontal movements can be made in no time) . The clock keeps ticking , So BATMAN decides to choose a path reaching the destination minimizing the maximum up distance and with as much time left as possible.

Every Hero Has a Journey. Every Journey Has an End !

" CatWoman : *You dont owe these people anymore . You've given them everything*  
BatMan : *Not everything , Not Yet .* "

NOTES :

BatMan requires to take the first jump on (1,1)

Print NO is no time is left

minimum max up-distance is the first priority.

## Input

t , number of testcases

n,T denoting the size of the grid , T time left.

n rows and n columns denoting the heights of the building

If BATMAN could reach the destination,

print "YES" , the maximum up distance travelled and the maximum time left with BATMAN

If he could not reach the destination within time print "NO"

## Constraints

$1 \leq n \leq 20$

$1 \leq t \leq 100$

## Example

Input:

```
1
3 40
2 4 3
4 5 3
2 4 6
```

Output:

```
YES : 2 32
```