

Hidden Triangle

ZPRAC-16-17-Lab8

[10]*Hidden Triangle*

Shaktimaan is our true hero who got superhuman strength and power through deep meditation and attaining control over five elements of life. He has extraordinary vision and nothing can stay hidden from him. Today he is in search of a particular kind of matrix called lower triangular matrix. As the matrix can be really large (100×100), he has asked you for help. Write a C code which checks whether a matrix is lower-triangular or not.

Definition: A square matrix M of size N is called Lower Triangular Matrix if all the entries above the main diagonal are zero (Main diagonal is the diagonal from the top left corner to the bottom right corner of a square matrix)

Example:

```
1 0 0
2 1 0
9 8 3
```

Input: First line contains an integer N ($1 \leq N \leq 100$) representing size of the square matrix.

Next N lines follow with N space separated integers each.

Output: Print FOUND TRIANGLE in case matrix is lower triangular, otherwise print NOT FOUND.

Example:

Input:

```
2
-1 1
1 3
```

Output:

NOT FOUND

Input:

```
3
-1 0 0
0 3 0
0 2 1
```

Output:

FOUND TRIANGLE