

Pursuit of Symmetry

ZPRAC-16-17-Lab8

[10]

Pursuit Of Symmetry

Shaktimaan is the noblest of creatures to live on Earth. He believes in peace and symmetry in life and gets annoyed by any imbalance. You being his greatest follower are on a mission to remove any dis-symmetry from the world of Mathematics. Write a C code that checks whether a given matrix is symmetric or not.

Definition: A square matrix M of size N is symmetric if $M=M^T$

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.

Output: Print Happy Shaktimaan in case matrix is symmetric, otherwise print Sorry Shaktimaan.

Example:

Input:

2

-1 1

1 3

Output:

Happy Shaktimaan

Input:

2

-1 0

1 3

Output:

Sorry Shaktimaan