ASTU ICPC Club
Prob:Johnny's Shapes

Johnny, a very talkative kindergartener, learned all about shapes yesterday during class and became entranced by triangles and quadrilaterals. He spent the rest of the day yapping about his new obsession to his classmates, his teachers, his mother – anyone who would listen. When it continued the next day, his mother decided that she needed a way to calm his seemingly irrepressible chattiness. She has devised a plan to preoccupy Johnny with books about shapes from the local library.

Johnny's mother would have no problem choosing the first few books available in the library – if it weren't for a peculiar idiosyncracy of his. You see, Johnny is a very emotional five-year-old. So deeply did he fall in love with his beloved shapes that he began to indiscriminately despise all shapes with more than four sides! If his mother were to accidentally include a book with a shape of this kind, she fears that he would become distraught, leaving her with an even worse situation than before. To complicate matters even further, she has discovered that the library has thousands of lengthy titles on shapes for her to choose from, making the task of locating books with only triangles and quadrilaterals rather significant. She has decided that she will need a program that determines whether or not a shape in a book will be safe to show to Johnny, and you have offered your assistance in writing it.

The Problem:

Given the number of sides of a particular shape, determine if the shape formed by those sides is one that Johnny will be happy to see.

The Input:

The input will begin with a single, positive integer, n, denoting the number of shapes to check. Following that will be n lines, with each line containing one integer, m ($3 \leq m \leq 500$), for the number of sides of that shape to check.

The Output:

For each shape, output a single line with one of the following, where i is the number of the shape corresponding to the i th line:

"Shape #i: Johnny's favorite!" if the shape is one that Johnny likes.

"Shape #i: Johnny will not be pleased with this one." otherwise.

Sample Input:

3
3
4
5

Sample Output:

Shape #1: Johnny's favorite!
Shape #2: Johnny's favorite!
Shape #3: Johnny will not be pleased with this one.