Volcano Madness

There is a quaint little town just a few miles away from a (very) active volcano. This volcano has erupted many times in the past, and many times this little town has been burned to a crisp. But the citizens are determined to make this town survive all of the volcano's eruptions in the future.

To prepare, they have blocked off a section in between the town and the volcano 10 miles wide and 10 miles tall in which they call the "Danger Zone." Throughout the years, they have measure the volcanic eruptions, and have discovered the volcano always spews out a fixed amount of magma per eruption (25 square miles). Knowing this, they have decided to make a bunch of "tracks" for the magma to flow through. They figure the magma will fill the tracks until there is no more magma, in which case the magma will cool and become a prime source for rock (the town's primary export).

Track pieces are 1 mile squares with grooves. They can enter/exit on any combination of the four sides. They are allowed to rotate the track pieces, and each entrance/exit of the grooves are connected to the others. So this means there are only ever four different types of track pieces: the ones with two entrances/exits, either as a straight pipe or a turn (pictures 1 and 2); the ones with three entrances/exits (Picture 3 below); and the ones where every side has a groove (Picture 4 below). The magma will flow through all grooves it can, cannot jump across gaps, and will not overflow until all grooves are filled, meaning if a groove leads to a space that is empty or the adjacent piece does not connect to the groove, the magma will wait to enter (or overflow into) that space. The town cannot build anything outside of the Danger Zone, but they placed the Danger Zone in such a way that the magma always starts at a corner. Their only problem is, their tracks are imported (they are made of special material). They have no idea how to lay them out on the danger zone so that they will be protected. They need you to let them know if the current batch of track pieces will sustain the magma if arranged in some way.

(1)

(2)

(3)

(4)

Input

Input will begin with a single number *V*, the number of volcanic eruptions to test. On each of the next *V* lines are descriptions of the track pieces the town has imported. It consists of a string consisting of a number between 1 and 4 (inclusive), representing the piece in its corresponding picture number. There will always be at least 25 pieces to work with.

Output

Output a single line saying "The town is safe this time." if there is an arrangement of the track pieces in the danger zone such that the magma may flow through at least 25 track pieces, or "Need more track pieces! Quickly!" if there is no such arrangement.

Sample Input

2

11111111121111111121111111121111111121111

11111111111111111111111111

Sample Output

The town is safe this time.

Need more track pieces! Quickly!