**Automorphic Number**

An automorphic number is a number whose square ends in the number itself. For example, 5 (52 = 25), 76 (762 = 5776) and 890625 (8906252 = 793212890625) are automorphic numbers.

Your task is to complete two methods in the following class.

public class AutomorphicNumber {

/\*

\* returns true if num is an automorphic number

\* false otherwise

\*/

public static boolean isAutomorphicNumber(int num) {

/\* implementation to be supplied by programming team \*/

}

/\*

\* returns an ArrayList of all automorphic numbers in

\* the int array numbers

\*/

public static ArrayList<Integer> getAutomorphicNumberFromArray(int[] nums) {

/\* implementation to be supplied by programming team \*/

}

}

A sample run of this program is as follows:

AutomorphicNumber.isAutomorphicNumber(7) return false

AutomorphicNumber.isAutomorphicNumber(5) return true

AutomorphicNumber.isAutomorphicNumber(76) return true

AutomorphicNumber.isAutomorphicNumber(11) return false

int [] numbers = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 24, 25, 26, 75, 76};

AutomorphicNumber.getAutomorphicNumberFromArray(numbers) returns an ArrayList with containing the following numbers: 1, 5, 6, 25, 76