

# Zillow Coding Test

Xiaoping Li

May 27, 2014

## 1 How to run:

Attention: make sure your laptop has installed maven and JVM.  
cd into Zillow folder;  
mvn test

## 2 Convert String to Long

StringUtilization provides a method to convert a string to long value.

Method to solve this problem is simply easy: find the char in each index, and sum them with its proper 10 multiplication together to get the real numeric value. And there some situation we need to take into consideration:

1. We have not specially treat overflow and underflow.
2. character other than "0 to 9 and '-' " are not valid.
3. empty strings and string only with "-" is equal to 0 in our algorithm.
4. "-" should be using in the first index location of the input string.
5. Empty space should be considered as a invalid input.
6. "00" input should be equal to 0.

According to the above consideration, I have written about 20 tests to verify its correctness. All is in the test folder.

## 3 Trinary Tree

I have used three class to achieve trinary tree delete and insert operation.

Node class contains the comparable values. NodeHolder class contains the node class. TrinaryTree class performs the final operation of insert and delete.

I have written two test case for insert and delete operation. And result shows both works correctly.