

UCF “Practice” Local Contest — Aug 24, 2013

Gas Price Is Going Up/Down

filename: gasprice

The gas stations have billboards showing the gas prices (we’ll assume only three categories of gas: Regular, Plus, and Super). These billboards display the prices of gas, but the problem is that sometimes some digits are missing from the prices on the billboards!

The Problem:

Given prices for the three categories of gas with at most one digit missing from a given price, you are to determine the exact value of each price. We will assume that Regular is cheaper than Plus which is cheaper than Super. Also assume that Regular is at least \$2.00 and Super is at most \$5.00.

The Input:

There will be multiple billboards (test cases) in the input file. The first input line contains a positive integer n , indicating the number of billboards to be processed. The billboards will be on the following n input lines, each on a separate line. Each billboard contains three prices, the first showing Regular, the second representing Plus, and the last showing Super. The first price starts in column one, each price uses three columns (decimal points are not in the input), and there is exactly one space separating prices. The characters used in a price are only digits 0 through 9 and hyphen to indicate a missing digit (there is at most one hyphen per price). Since gas is at least \$2.00, the digits 0 or 1 will not appear as the first character for a price in the input. Similarly, the maximum gas price (\$5.00) dictates possible valid values for the first character.

The Output:

At the beginning of each test case, output “Gas Station # g :”, where g is the test case number (starting from 1). For each gas station, print the input values and then the output values (each on a separate line and indented three columns). If there are multiple possible (valid) answers, use the lowest valid value for Regular. Then, with the lowest valid value for Regular, use the lowest valid value for Plus. Then, with the lowest valid value for Plus, use the lowest valid value for Super. Assume that input values will always result into at least one possible valid answer.

Leave a blank line after the output for each test case. Follow the format illustrated in Sample Output. Be sure to line up the output with spaces exactly as given in the Sample Output.

(Sample Input/Output on the next page)

Sample Input:

```
2
2-9 285 -99
-50 -99 -99
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Sample Output:

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Gas Station #1:
  Input:  2-9 285 -99
  Output: 209 285 299

Gas Station #2:
  Input:  -50 -99 -99
  Output: 250 299 399
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