



1

2

## ☆ Number Patterns & finding the possible smallest numeric value

### Question:

Given a Pattern containing only Ns and M's . N represents ascending and M represents descending , Each character (M or N) needs to display sequence of numbers(2 numbers) explaining the ascending or descending order (for ex: 21 -> represents descending -> M) . The second character in the pattern takes the last digit from first character and builds the sequence and so on..Please look at example section below.

There could be multiple numbers satisfying the pattern. The goal is to find out the lowest numeric value following the pattern.

### Constraints:

- Input can have maximum 8 characters
- Output can have Digits from 1-9 and Digits can't repeat.
- In case of no possible output or incorrect input value (like blank /null /NON M or N character) please return -1.

### Example Section:

Input : M

Output: 21 (2 -> 1 shows descending and possible smallest numeric value. Even 65 or 74 can qualify, but 21 being the smallest numeric value is the correct answer)

Input : MNM

Output:2143 (M represents descending 2->1 , N represents ascending 1->4 (1 is coming from last character) , M represents descending 4->3(4 is coming from last character sequence) -- There would be many number qualifying the pattern like 3142 ,8796,6241 etc.. 2143 is the lowest numeric value for this pattern sequence.)

```
102
103         res =
findPossibleSmallestNumberMatchingPattern(patter
n);
104         bw.write(String.valueOf(res));
105         bw.newLine();
106
107         bw.close();
108     }
109 }
110 }
```

Line: 83 Col: 3

Run Code

Submit code &amp; Continue

(You can submit any number of times)

☐ Test against custom input

|| [Download sample test cases](#) The input/output files have Unix line endings. Do not use Notepad to edit them on windows.

**Compiled successfully. All available test cases passed!**

💡 **Tip: Debug your code against custom input**

Test Case #1: ✓

Test Case #2: ✓

Test Case #3: ✓

Test Case #4: ✓

Test Case #5: ✓

Test Case #6: ✓

Test Case #7: ✓