

Restore IP Addresses

Try to solve the Restore IP Addresses problem.

We'll cover the following ^

- Statement
- Examples
- Understand the problem
- Figure it out!
- Try it yourself

Statement

Given that a string, `s`, contains digits, return a list of all possible valid IP addresses that can be obtained from the string.

Note: The order in which IP addresses are placed in the list is not important.

A valid IP address is made up of four numbers separated by dots `.`, for example, `255.255.255.123`. Each number falls between 0 and 255 (including 0 and 255), and none of them can have leading zeros.

Constraints:

- The input string `s` consists of digits only.
- $4 \leq s.length \leq 12$

Examples

Sample example 1

Input

"1253412125"

The possible valid combinations of the IP address from the given string can be:

"125.34.12.125"

"125.34.121.25"

Understand the problem

Let’s take a moment to make sure you’ve correctly understood the problem. The quiz below helps you check if you’re solving the correct problem:

1

What is the correct output if the following string is given as input?

IP address = “00000000”

A) [“000.000.00”, “00.000.000”, “000.00.000”, “0.0.000.000”, “0.00.00.000”]

B) [“000.000.00”]

C) [“00.00.00.00”]

D) None

Submit Answer

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Question 1 of 4
0 attempted


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Reset Quiz ↻

Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.

Note: As an additional challenge, we have intentionally hidden the solution to this puzzle.

 Drag and drop the cards to rearrange them in the correct sequence.

Initially place all three dots each after one digit, e.g.,
2.5.5.25511135

Recursively add the next digit from the last segment to its previous segment of the IP address, e.g., 2.5.52.5511135

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If the number in any segment exceeds 255, move this digit to the second segment.

Make a condition that checks whether each segment lies within the range $0 \leq x \leq 255$.

Once all dots are placed and each segment is valid, return the IP address.

Reset

Show Solution

Submit



Implement your solution in `main.java` in the following coding playground.

Java

usercode > main.java

```
1 import java.util.*;
2 public class Main{
3     public static List<String> restoreIpAddresses(String s) {
4         // Write code here
5     }
6     return new ArrayList<String>();
7 }
8 }
```

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Test Cases Results

Case 1Case 2Case 3

Input #1

"255255255255"

Restore IP Addresses

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Solution: House Robb...

Solution: Restore IP A...

Mark as Completed



