93. Restore IP Addresses

Given a string containing only digits, restore it by returning all possible valid IP address combinations.

Example:

```
Input: "25525511135"
Output: ["255.255.11.135", "255.255.111.35"]
```

```java
public class L93 {
    public List<String> restoreIpAddresses(String s) {
        List<String> result = new ArrayList<String>();
        dfs(result, s, "", 0, "", 0);
        return result;
    }

    /*
     * 参数说明
     * temp表示当前得到的字符串
     * curSum是前一个.到目前字符的全部
     * times是当前为止字段的数量，ip地址只能为4个字段。
     */
    private void dfs(List<String> result, String s, String temp, int curIndex, String curSum, int times) {
        if(times < 4 && times > 0) {
            temp = temp + curSum + ".";
            curSum = "";
        }else if (times == 4 && curIndex == s.length()) { //得到4个字段后，如果curIndex不小于s.lenght()，那么ip合法
            result.add(temp + curSum);
        }
        for(int i = curIndex; i < s.length() && times < 4; i++) {
            curSum = curSum + s.charAt(i);
            if(curSum.length() > 1 && curSum.startsWith("0") || Integer.parseInt(curSum) > 255) //该字段ip不合法
                break;
            dfs(result, s, temp, i + 1, curSum, times + 1);
        }
    }
}
```