Problem: Letter Combinations of a Phone Number

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class Solution {
  public List<String> letterCombinations(String digits) {
     Map<Integer, String> pad = new HashMap<>();
     pad.put(2, "abc");
     pad.put(3, "def");
     pad.put(4, "ghi");
     pad.put(5, "jkl");
     pad.put(6, "mno");
     pad.put(7, "pqrs");
     pad.put(8, "tuv");
     pad.put(9, "wxyz");
     List<String> combinations = new ArrayList<>();
     if(digits.length() == 0)
       return combinations;
     char[] cs = digits.toCharArray();
     List<String> lettersGrp = new ArrayList();
     for(char c: cs){
       lettersGrp.add(pad.get(Character.getNumericValue(c)));
     }
     combinations.add("");
     for (int ii=0; ii<lettersGrp.size(); ii++) {
       ArrayList<String> strs = new ArrayList<>();
       for (int i = 0; i < combinations.size(); i++) {
          for (int j = 0; j < lettersGrp.get(ii).length(); j++) {
             strs.add(combinations.get(i) +
                  Character.toString(lettersGrp.get(ii).toCharArray()[j]));
          }
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}
    combinations.clear();
    combinations.addAll(strs);
}
    return combinations;
}
```