



```
public static List<String> permute(String str, int l, int r) {  
    List<String> result = new ArrayList<>();  
    if (l == r) {  
        result.add(str);  
    } else {  
        for (int i = l; i <= r; i++) {  
            str = swap(str, l, i);  
            List<String> res = permute(str, l + 1, r);  
            result.add(i + "(" + res + ")");  
            str = swap(str, l, i);  
        }  
    }  
    return result;  
}
```

```
public static String swap(String a, int i, int j) {  
    char temp;  
    char[] charArray = a.toCharArray();  
    temp = charArray[i];  
    charArray[i] = charArray[j];  
    charArray[j] = temp;  
    return String.valueOf(charArray);  
}
```