Question: https://leetcode.com/problems/generate-parentheses/

So we need to make all possible combination of parenthesis.

What we do is we can add n opening parenthesis and add a closing parenthesis till we have number of opening parenthesis greater than closing parenthesis.

So we solve it using backtracking.

Code:  
class Solution {

public List<String> generateParenthesis(int n) {

List<String> output= new ArrayList();

backtrack(output, "", 0, 0, n);

return output;

}

public void backtrack(List<String> output, String currentString, int open, int close, int max) {

if(close==max){

output.add(currentString);

return ;

}else{

if(open<max){

backtrack(output, currentString+'(', open+1, close, max);

}

if(close<open){

backtrack(output, currentString+')', open, close+1, max);

}

}

}

}

Github Link :<https://lnkd.in/ecwtJeaz>