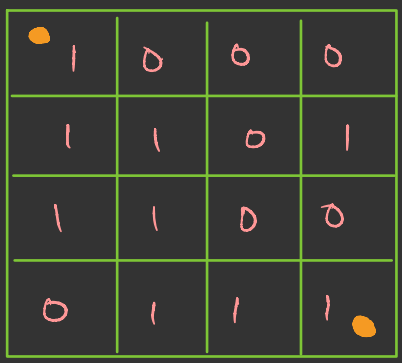
Ques Rat in a maze



U D L R

$3^{n \times n}$

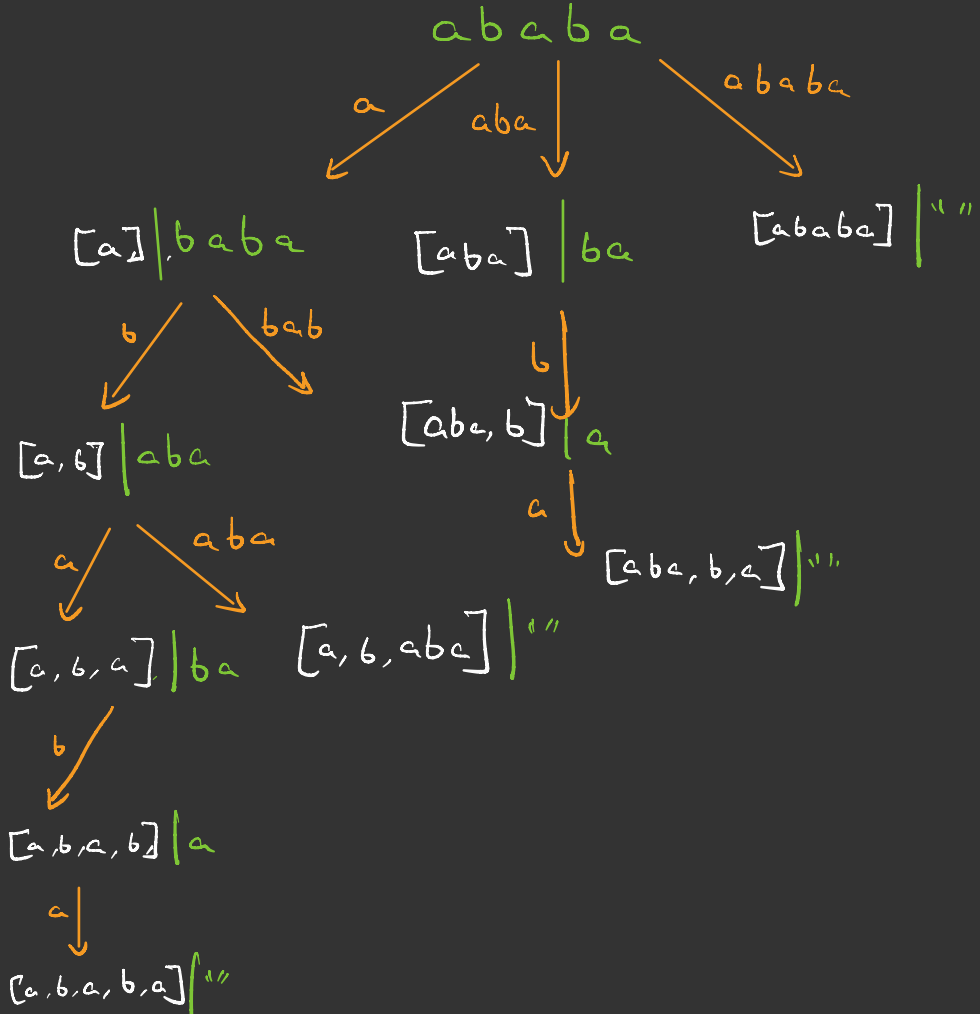
$\Rightarrow O(3^{n^2})$

Ques Palindrome partition

ababa →

a, b, a, b, a
aba, b, a
a, b, aba
a, bab, a
ababa

Expectation



```java
public void helper(String s, ArrayList<String> myCurrentPartions) {
    if(s.length() == 0) {
        ans.add(new ArrayList<>(myCurrentPartions));
        return;
    }
   for(int i = 1; i <= s.length(); i++) {
       String prefix = s.substring(0, i);
       if(isPalindrome(prefix)){
           String remaining = s.substring(i);
           myCurrentPartions.add(prefix);
           helper(remaining, myCurrentPartions);
           myCurrentPartions.removeLast();
       }
   }
}
```

$TC \Rightarrow O(2^n \times n)$

Ques Sudoku Solver

	0	1	2	3	4	5	6	7	8
0	5	3	1	2	7	6			
1	6			1	9	5			
2		9	8					6	
3	8				6				3
4	4			8		3			1
5	7				2				6
6		6					2	8	
7				4	1	9			5
8					8			7	9

1. Row
2. Column
3. grid

gr = r/3 * 3

gc = c/3 * 3