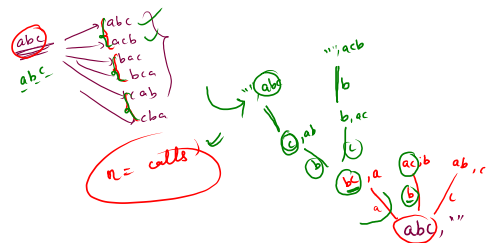


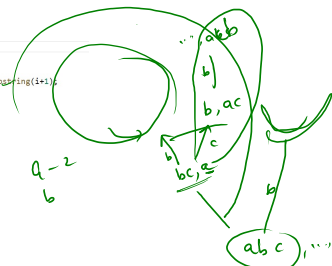
## Print maze Path with Temp

```
public static void printMazePaths(int sr, int sc, int dr, int dc, String psw) {
    if(sr == dr && sc == dc){
        //base
        System.out.println(psw);
        return;
    }
    for(int d = 0; d < dir.length; d++){
        for(int jump = 1; jump <= Math.max(dr, dc); jump++){
            int r = sr + jump * dir[d][0];
            int c = sc + jump * dir[d][1];
            if(r >= 0 && r <= dr && c >= 0 && c <= dc){
                printMazePaths(r, c, dr, dc, psw + dir[d][0] + jump);
            }
        }
    }
}
```

## Print Permutations



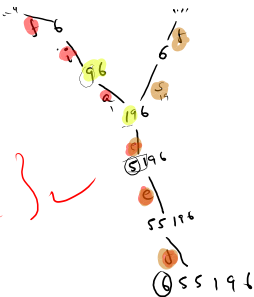
```
public static void printPermutations(String str, String ans) {
    if(str.length() == 0){
        System.out.println(ans);
        return;
    }
    for(int i = 0; i < str.length(); i++){
        char ch = str.charAt(i);
        String ros = str.substring(0, i) + str.substring(i+1, str.length());
        printPermutations(ros, ans + ch);
    }
}
```



## Print Encodings

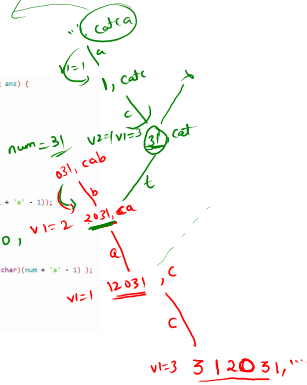
a-1  
b-2  
c-3  
d-4  
e-5  
f-6  
...

decalf  
fdecf

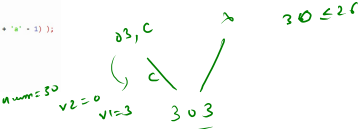


11 15  
11 23

```
public static void printEncodings(String str, String ans) {
    if(str.length() == 0){
        System.out.println(ans);
        return;
    }
    if(str.charAt(0) == '0'){
        return;
    }
    char ch1 = str.charAt(0);
    int v1 = ch1 - '0';
    printEncodings(str.substring(1, ans + (char)(v1 * 'a' - 1)));
    if(str.length() > 1){
        char ch2 = str.charAt(1);
        int v2 = ch2 - '0';
        int num = v1 * 10 + v2;
        if(num <= 26){
            printEncodings(str.substring(2, ans + (char)(num * 'a' - 1)));
        }
    }
}
```



```
public static void printEncodings(String str, String ans) {
    if(str.length() == 0){
        System.out.println(ans);
        return;
    }
    if(str.charAt(0) == '0'){
        return;
    }
    char ch1 = str.charAt(0);
    int v1 = ch1 - '0';
    printEncodings(str.substring(1, ans + (char)(v1 * 'a' - 1)));
    if(str.length() > 1){
        char ch2 = str.charAt(1);
        int v2 = ch2 - '0';
        int num = v1 * 10 + v2;
        if(num <= 26){
            printEncodings(str.substring(2, ans + (char)(num * 'a' - 1)));
        }
    }
}
```



```
public static void printEncodings(String str, String ans) {
    if(str.length() == 0){
        System.out.println(ans);
        return;
    }
    if(str.charAt(0) == '0'){
        return;
    }
    char ch1 = str.charAt(0);
    int v1 = ch1 - '0';
    printEncodings(str.substring(1, ans + (char)(v1 * 'a' - 1)));
    if(str.length() > 1){
        char ch2 = str.charAt(1);
        int v2 = ch2 - '0';
        int num = v1 * 10 + v2;
        if(num <= 26){
            printEncodings(str.substring(2, ans + (char)(num * 'a' - 1)));
        }
    }
}
```