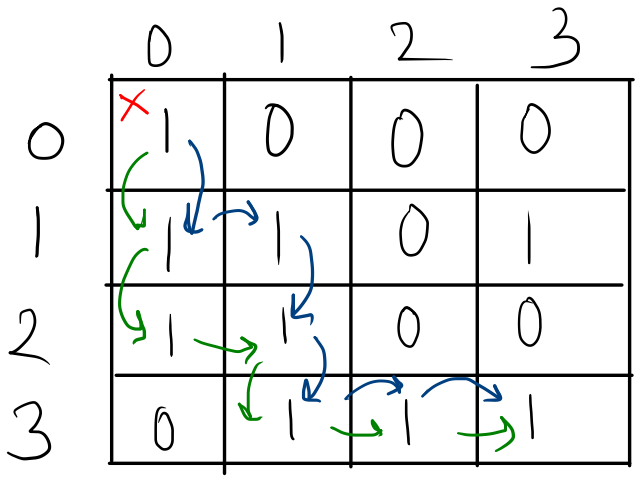
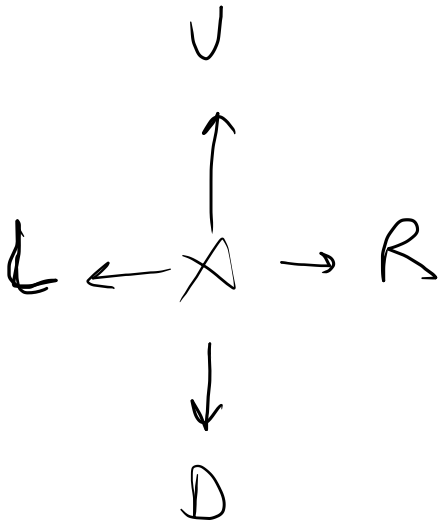
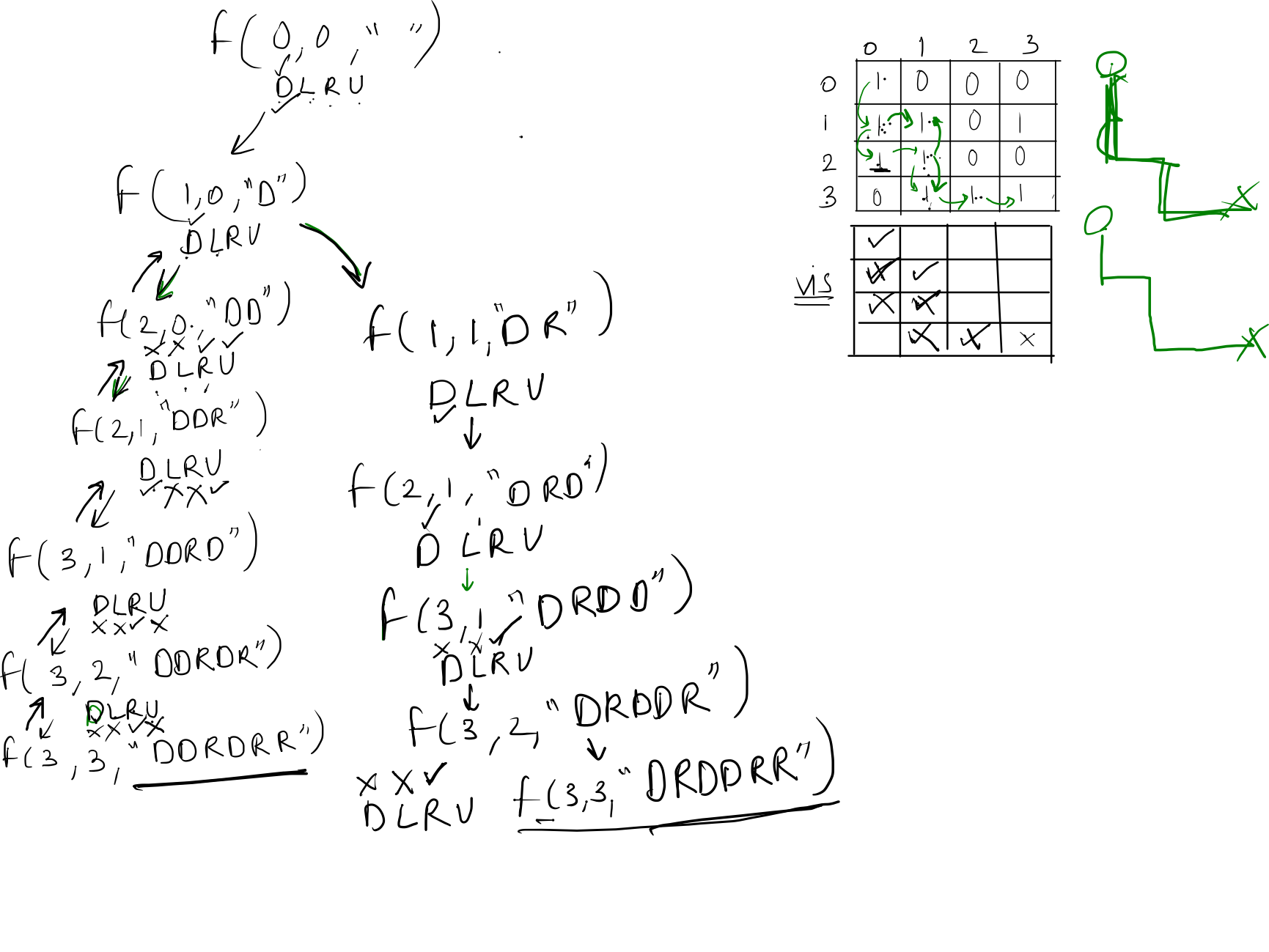
Rat in a Maze

DDRDRR

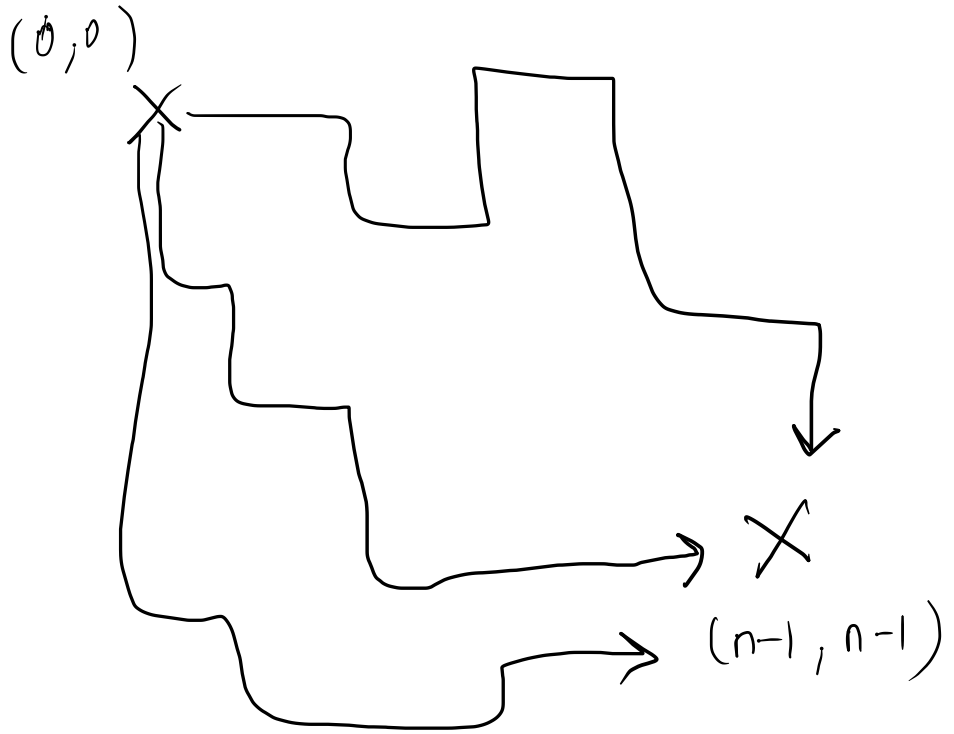
DRDDRR






f(0,0,"")
DLRU
f(1,0,"D")
DLRU
f(2,0,"DD")
DLRU
f(2,1,"DDR")
DLRU
f(3,1,"DDRD")
DLRU
f(3,2,"DDRDR")
DLRU
f(3,3,"DDRDRR")
f(1,1,"DR")
DLRU
f(2,1,"DRD")
DLRU
f(3,1,"DRDD")
DLRU
f(3,2,"DRDDR")
DLRU
f(3,3,"DRDDRR")
0 1 2 3
0 1 0 0 0
1 1 1 0 1
2 1 1 0 0
3 0 1 1 1
VIS

Rat in a Maze

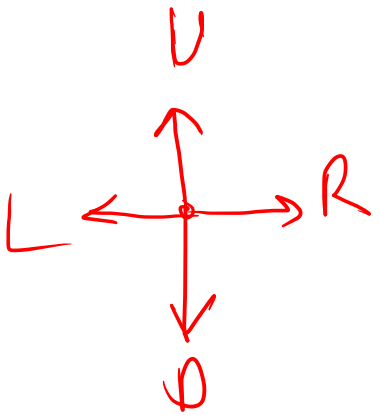


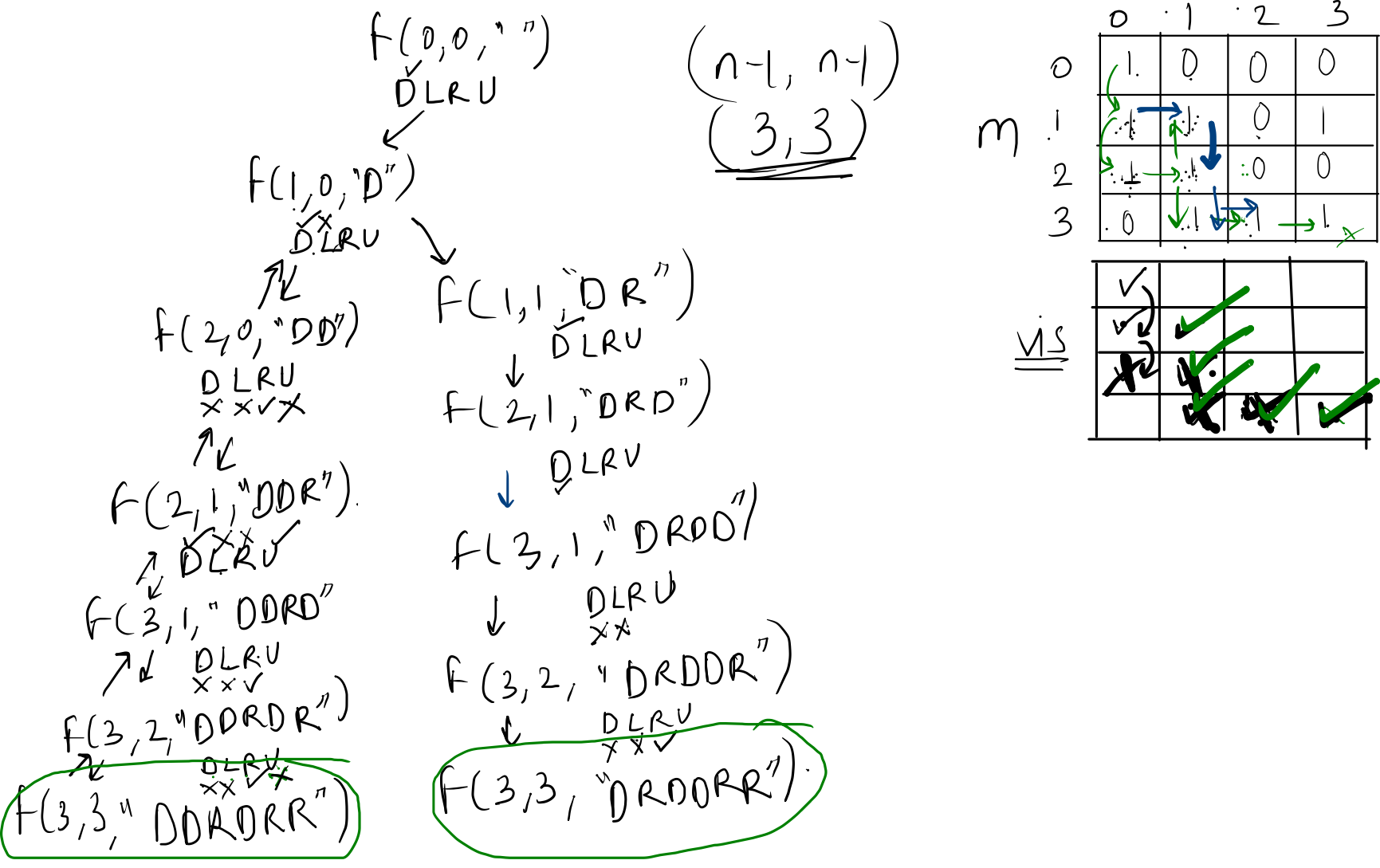
Rat in a Maze

DDRDRR

DRDDRR

	0	1	2	3
0	X 1	0	0	0
1	1	1	0	1
2	1	1	0	0
3	0	1	1	1 X




f(0,0,"")
DLRU
f(1,0,"D")
DLRU
f(1,1,"DR")
DLRU
f(2,0,"DD")
DLRU
f(2,1,"DRD")
DLRU
f(2,1,"DDR")
DLRU
f(3,1,"DRDD")
DLRU
f(3,1,"DDRD")
DLRU
f(3,2,"DRDDR")
DLRU
f(3,2,"DDRDR")
DLRU
f(3,3,"DRDDRR")
f(3,3,"DDRDRR")
(n-1, n-1)
(3,3)
m
0 1 2 3
0 1 0 0 0
1 1 1 0 1
2 1 1 0 0
3 0 1 1 1
vis

Mark the current cell as visited

vis [r][c] = true

Return if

vis[r][c] = true

m[r][c] = 0

---

conditions:

r >= 0 , r < n

c >= 0 , c < n

Pseudocode

f (down) → p + 'D'

f (left) → p + 'L'

f (right) → p + 'R'

f (up) → p + 'U'

Destination Reached → Add path to answer

```
if ( r == n-1  && c == n-1 )
    ans.add(p)
```

$$T.C = O(3)^{N^2}$$

$$SC = O(L \times x)$$

$L \rightarrow$ length of path

$x \rightarrow$ no. of paths