


Recursion {Day-10}

i/p	m	y	<u>cols</u>		
n	row	0	1	2	3
0	0	0	0	0	0
1	1	1	0	1	
2	2	1	1	0	0
3	3	0	1	1	1

src $\rightarrow (0, 0)$

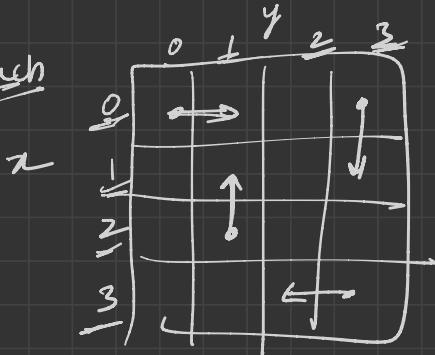
dest = $(n-1, n-1)$

L \rightarrow open path (Allowed)

0 \rightarrow Blocked path (Not allowed)



Approach



4 movement

Up $\rightarrow (n-1, y)$

down $\rightarrow (n+1, y)$

left $\rightarrow (n, y-1)$

right $\rightarrow (n, y+1)$

$src\ x = 0$

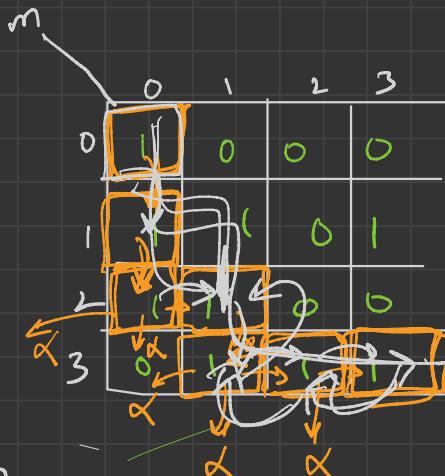
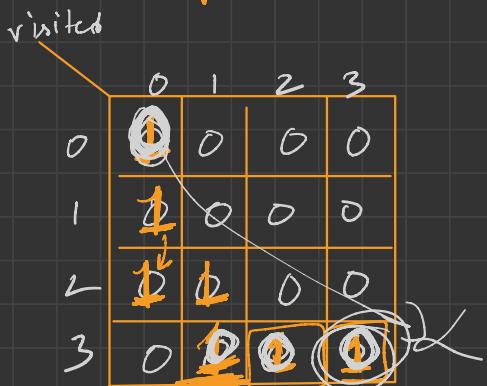
$src\ y = 0$

$(0,0) \rightarrow \underline{D} | \underline{L} | \underline{R} | \underline{U}$

path = DDRDRR

$src = (0,0)$
path = " "

D | L | R | U



path = DDRDRR R \rightarrow possible solution

$(i, j) \rightarrow (k, l)$

\Rightarrow safe to move

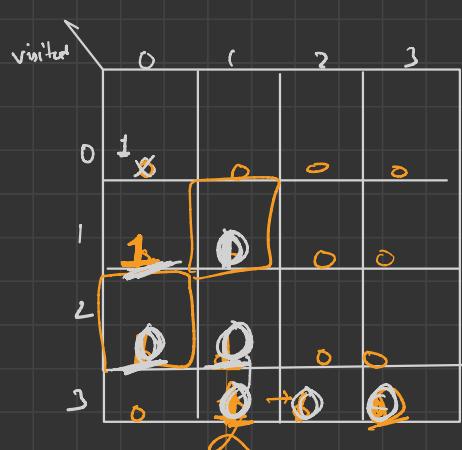
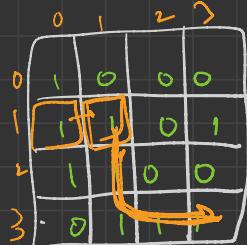
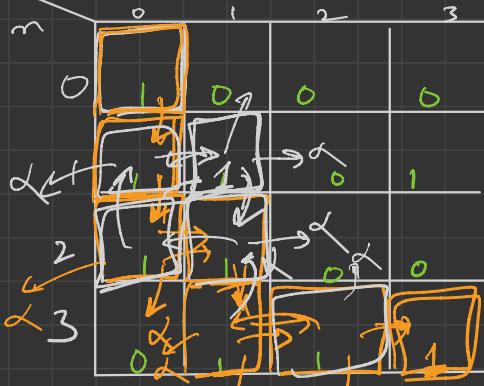
matrix K andan honi chahiye

$$m[K][l] = 1$$

$$\text{visited}[K][l] = 0$$

→ move
→ visited $[k][l] = \text{True}$

→ when function call returns
→ visited $[k][l] = \underline{\text{False}}$



$\{(0,0), \text{""}\}$ $\overline{D} | L | R | U$

$\{(1,0), \text{"D"}\}$ $\overline{D} | \overline{L} | R | U$

$\{(1,1), \text{"DR"}\}$

$\{(2,0), \text{"DD"}\}$ $\overline{D} | \overline{L} | \overline{R} | \overline{U}$

H/w

$\{(2,1), \text{"DDR"}\}$ $\overline{D} | \overline{L} | \overline{R} | \overline{U}$

$\{(3,1), \text{"DDRD"}\}$ $\overline{D} | \overline{L} | \overline{R} | \overline{U}$

$\{(3,2), \text{"DDRDR"}\}$ $\overline{D} | \overline{L} | \overline{R} | \overline{U}$

$\{(3,3), \text{"DDRDRR"}\}$

