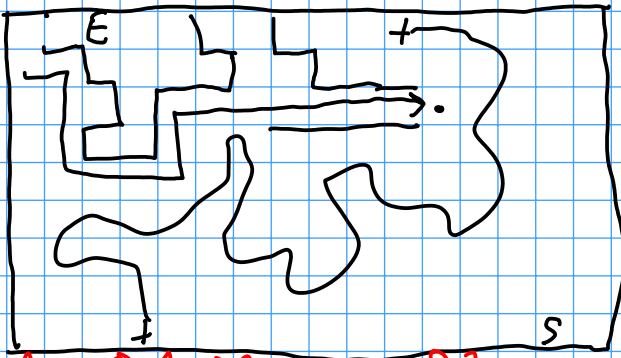
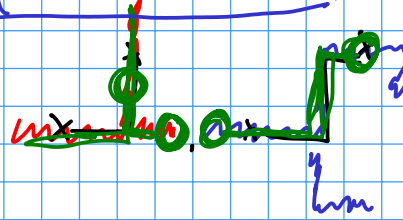


$l = \# \text{ colonnes}$

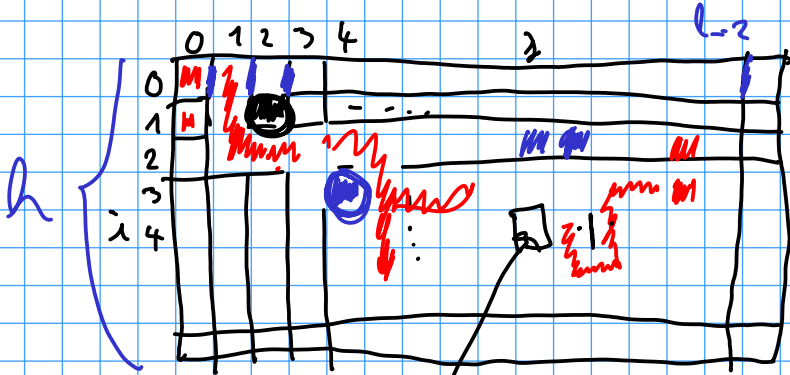
$\# \text{ lignes} = h$



$l \times h$  cases  
 $(l-1)h + (h-1)l$  murs?



0,0, 0,1 0,1, 0,2 0,2, 0,3 ...

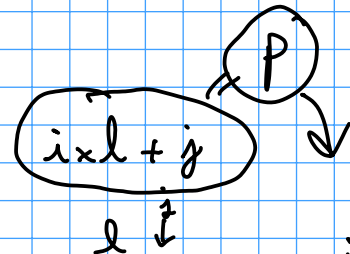


$l \times h$  zones

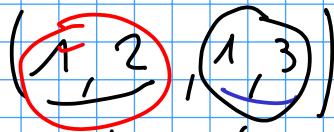
nombre  $l \times h - 1$  murs

1 zone

Case  $(i, j)$   $i$  ligne  $j$  colonne



struct  $\left\| \begin{array}{l} \text{mur} \\ \text{mur} \end{array} \right.$



	0	1	2	3	4
0	0	1	2	3	4
1	5	6	7	8	9
2	10	11			
	...				19

$\tilde{i} = P \% l$   
 $i = P / l$

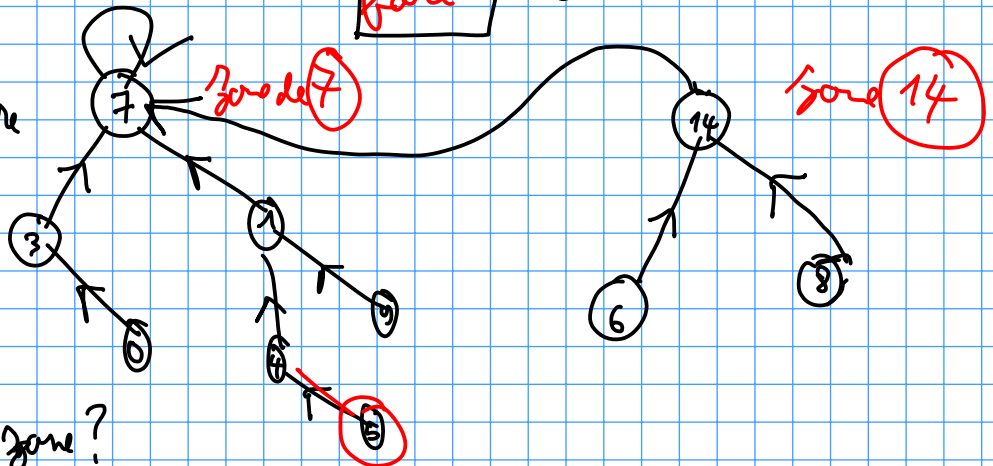
zone d'accessibilité distinctes.

forest

Jasse # arbres.

Requête FIND

Requête UNION arbre

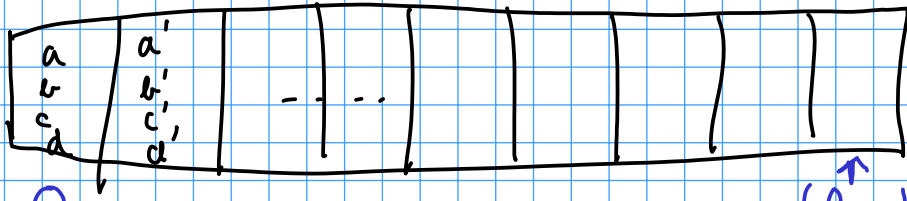


Case 6

Sortelle dans la même zone?

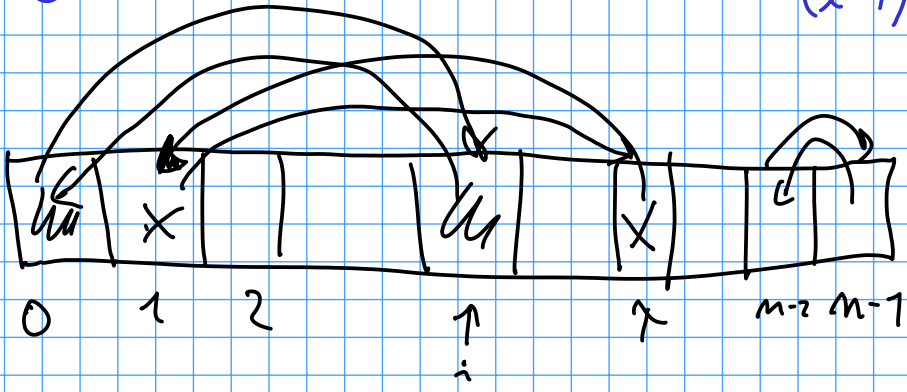
NON  
 Je peux traverser le mur

3	7	7	14	7	7
0	1	2	3	4	5



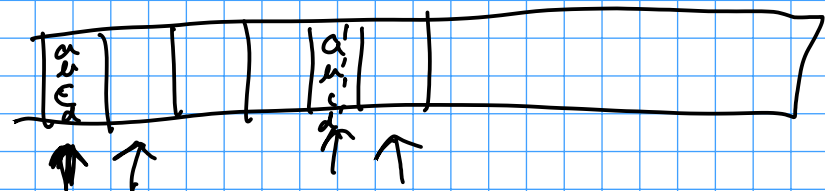
# cases:  $(l-1)h + (h-1)l$

$(l-1)h + (h-1)l - 1$

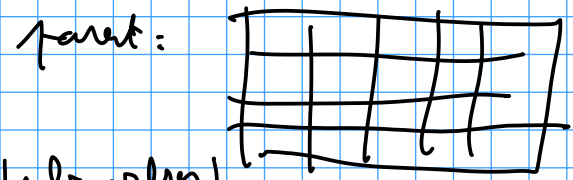


- $i$  aléatoire dans  $[0, m-1]$
- $i$  aléatoire dans  $[1, m-1]$
- $i$  aléatoire dans  $[2, m-1]$
- $i$  aléatoire dans  $[m-2, m-1]$

arbre aléatoire sur les murs

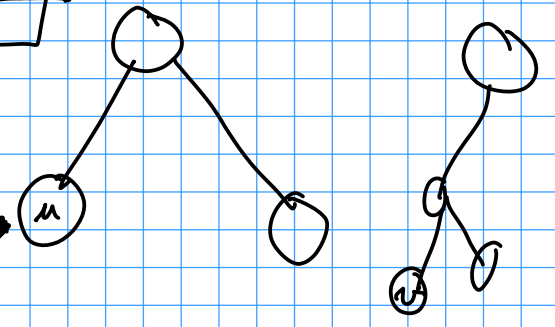
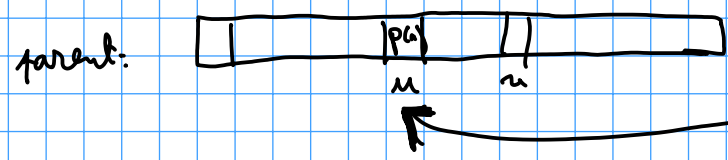


forest:



nb\_arbres

arbre = forest



parent [h] [l] c.first  
 pere (base)  $\rightarrow$  return parent [c.first] [c.second]