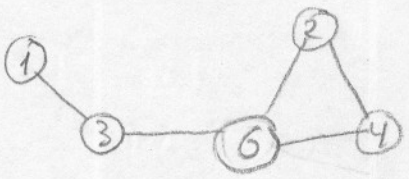
$$\begin{array}{lcccccc} & 0 & 1 & 2 & & d\text{-}1 & d \\ \text{int *forest} & \boxed{0} & \boxed{1} & \boxed{1} & \cdots & \boxed{1} & \boxed{1} \end{array}$$

a green tree has "1", a burnt tree has "0"

initialize all trees to one.

Example:



$$\begin{array}{c|cccccc} & 1 & 2 & 3 & 4 & 5 & 6\ldots \\ \hline 1 & 1 & 0 & 1 & 0 & 0 & 0 \\ 2 & 0 & 1 & 0 & 1 & 0 & 1 \\ 3 & 1 & 0 & 1 & 0 & 0 & 1 \\ 4 & 0 & 1 & 0 & 1 & 0 & 1 \\ 5 & 0 & 0 & 0 & 0 & 1 & 0 \\ 6 & 0 & 1 & 1 & 0 & 0 & 1 \end{array}$$

Allways start with the first tree (ff==1)

initialize the burning cluster list:

$$\begin{array}{lccccc} & 0 & & & & d\text{-}1 \\ \text{int *bc} & \boxed{1} & \boxed{0} & \boxed{0} & \cdots & \boxed{0}\,\boxed{0} \end{array} \qquad bf=0,\ bl=1$$

and who is burning

$$\begin{array}{lcccccc} & 0 & 1 & & & & d \\ \text{int *isb} & \boxed{0} & \boxed{1} & \boxed{0} & \cdots & \boxed{0} & \boxed{0} \end{array}$$

Next, go through every neighbor of tree "1" (in this case only one neighbor, tree "3"), and check with "isb" whether is burning.

Because "3" is not burning, we do:

$$\begin{array}{lccccccc} & 0 & 1 & 2 & & & d\text{-}2 & d\text{-}1 \\ \text{bc} & \boxed{1} & \boxed{3} & \boxed{0} & \cdots & & \boxed{0} & \boxed{0} \end{array}$$

$$\begin{array}{lcccccccc} & 0 & 1 & 2 & 3 & 4 & & d\text{-}1 & d \\ \text{isb} & \boxed{0} & \boxed{1} & \boxed{0} & \boxed{1} & \boxed{0} & \cdots & \boxed{0} & \boxed{0} \end{array}$$

bl++; (bl is number of burning trees in the cluster)

Since there are no more neighbors of "1" that are untouched by the fire, we move (bf++) to next tree in "bc", which in this case is "3", and so on, until there are no more unburned trees in the cluster.

At the end, we have

	0	1	2	3	4				d-1
bc	1	3	6	2	4	0	-	0	0

	0	1	2	3	4	5	6	7		d
isb	0	1	1	1	1	0	1	0	...	0

$bf = 4$, $bl = 4$

Then we set these trees as burnt, ie:

	0	1	2	3	4	5	6	7		d
forest	0	0	0	0	0	1	0	1	...	1

Then we find the next green tree with the smaller ID, in this case "5" and we do $ff = 5$ and again initialize the burning cluster

	0	1	2		d-1
bc	5	0	0	......	0

	0	1	2	3	4	5	6		d
isb	0	0	0	0	0	1	0	0	0

$bf = 0$, $bl = 1$

Note that trees "1", "2", "3", "4", and "6", ie, all the burnt trees, can not belong to same cluster than "5". If that were the case, then "5" would have burnt too.