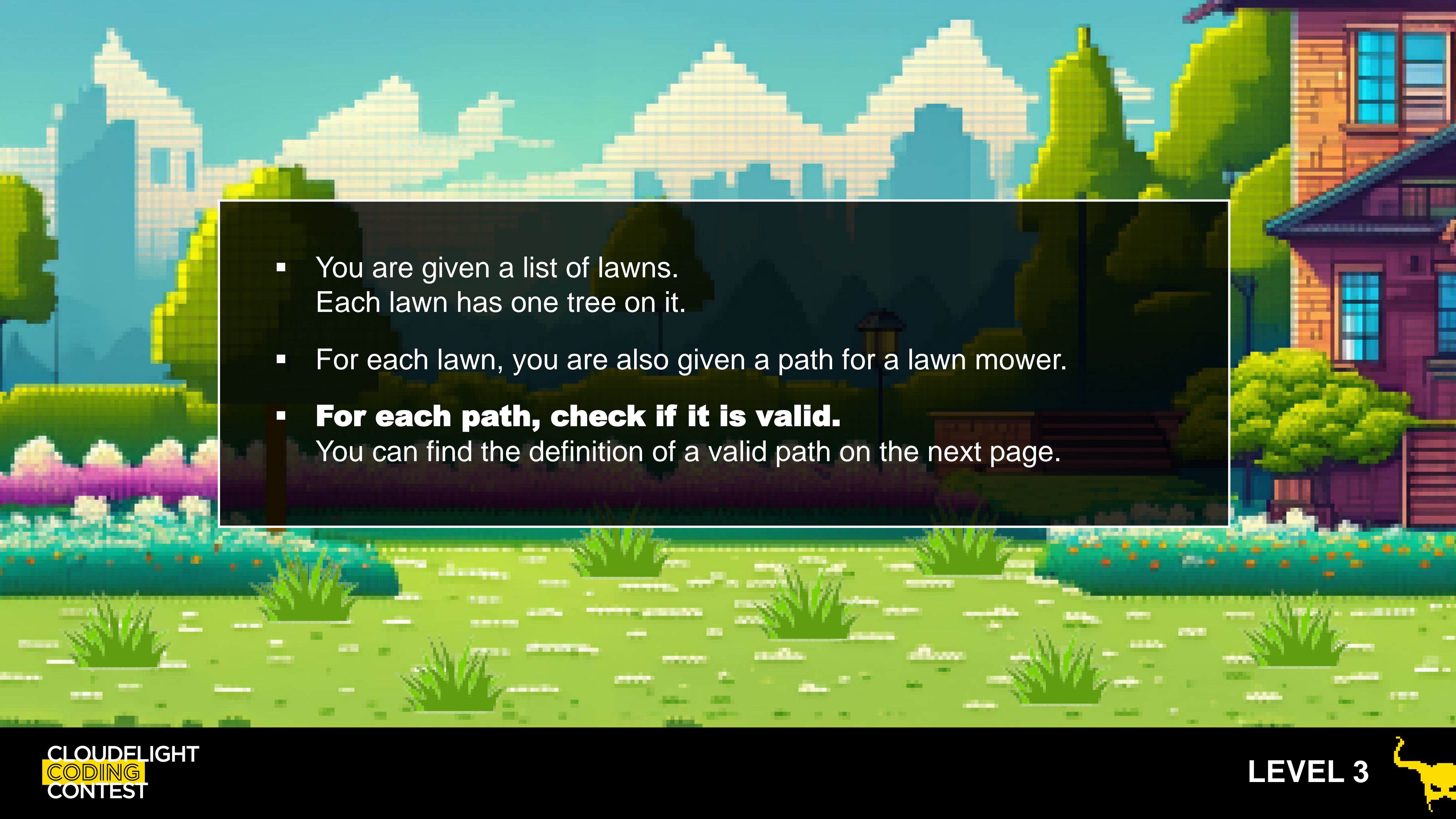


# LEVEL 3





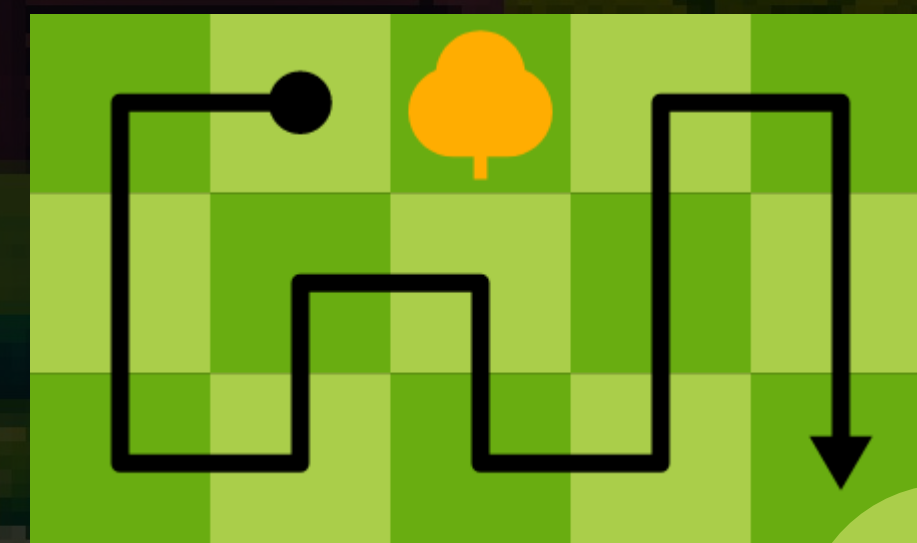
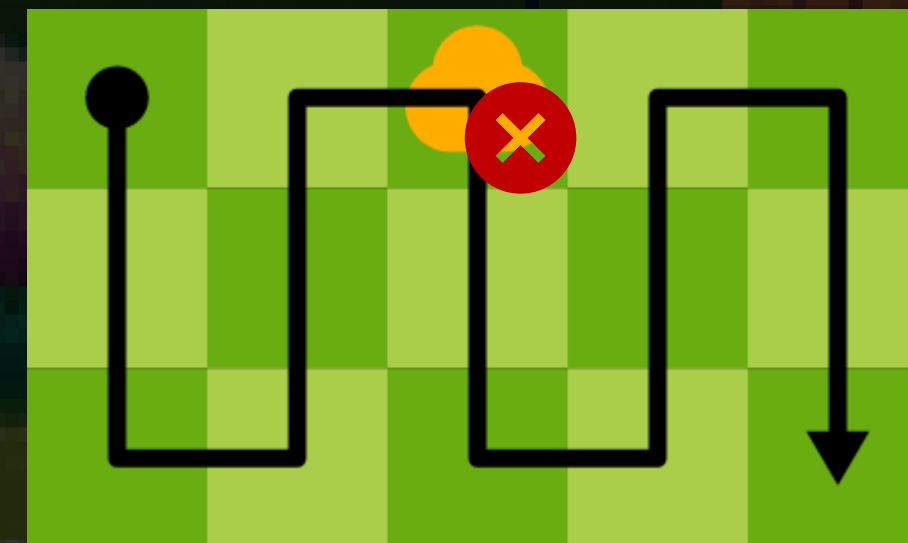
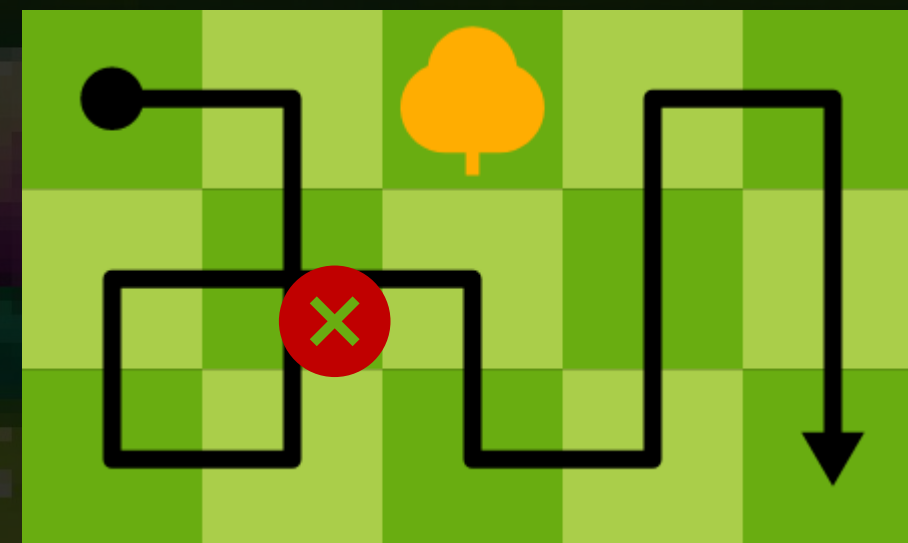
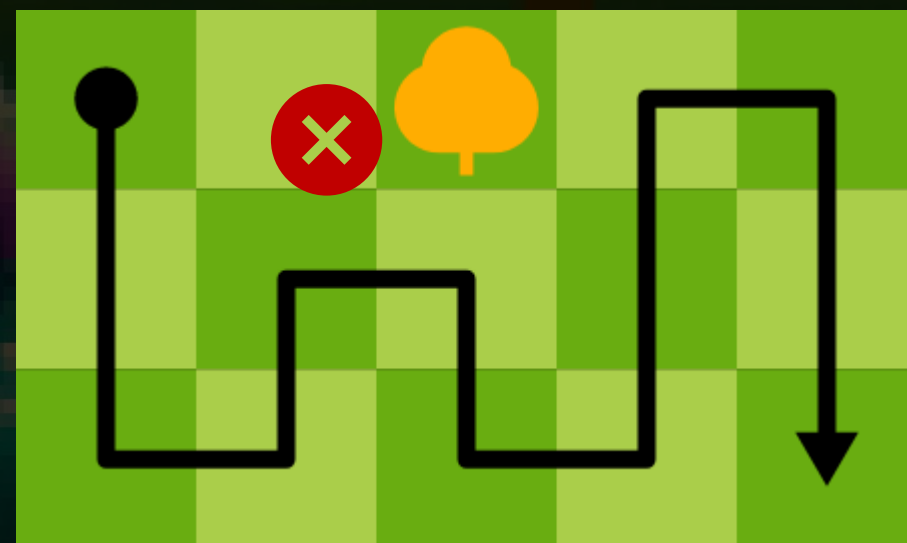
- 
- You are given a list of lawns. Each lawn has one tree on it.
  - For each lawn, you are also given a path for a lawn mower.
  - **For each path, check if it is valid.** You can find the definition of a valid path on the next page.





A path is valid if:

- It visits each free cell of the given lawn
- It **does not** visit any cell twice
- It **does not** visit the cell with the tree on it
- It **does not** leave the lawn





Input

Name	Description	Example
N	Number of lawns	4 5 3 ..X.. ..... ..... SSDWSDWDSS 5 3 ..X.. ..... ..... DSSAWDDSDWDSS 5 3 ..X.. ..... ..... SSDWWDSSDWWDSS 5 3 ..X.. ..... ..... ASSDWSDWDSS
Repeated N times		
Lawn size	The width followed by the height of the lawn, separated by a space	
Lawn	A paragraph of characters ‘.’ represents a free cell ‘X’ represents the tree	
Path	A string of characters	

Output

Name	Description	Example
Validity (repeated N times)	'VALID' if the conditions of the previous page are met Otherwise 'INVALID'	INVALID INVALID INVALID VALID





# HAPPY MOWING!

PROCESSING...



CLOUDEFIGHT  
CODING  
CONTEST

#WeLoveSoftware  
u too? [cloudflight.io/career](https://cloudflight.io/career)

Lawn Mower

