Python Documentation For Peers

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Approach:

These are some functions that are used to Capture all regions that are 4-directionally surrounded by 'X'.

- First main function will be called, in which first it will take input from the user and then it will call solve function.and at the end it is calling print function, which will be print matrix after doing all its work.
- Solve function : In solve function, first it is traversing on the first and last row and applying dfs on it to change all borders and connected O's into $, then it is traversing first and last column elements and applying dfs on these border elements to convert them into $.
  After converting border O's into $, it is converting all other O's into X's that are inside the surrounding region.
- Dfs function - it is used to visit all the elements reachable from border Os. Firstly it will return if invalid row or number.if the current element is O then converting it into $ and Traversing all the four board elements reachable from the current element.
- isValid function - This function checks whether current position can be captured or not. If a row is less than 1 or greater than equal to total number of rows or column is less than 0 or greater than equal to total number of columns or if it is visited then return false, else it will return true.

What i have learnt from this approach:

I have learnt how to make code more readable , how to add comments precisely and how to make global variables in python .

Peer Name - Akash Singhal

Approach:
These are some functions that are used to Capture all regions that are 4-directionally surrounded by 'X'.

- It is taking row wise input from the user and calling the main function.
- Main function - it is calling capture function on border nodes for converting them into $
- isValid function - This function checks whether current position can be captured or not. If an element is between 1st and last-1 row and 1st and last column-1 (no borders involved) then it is a valid element to change into X. it will return true if above condition true else it will return false
- Capture Function - This function is used for applying dfs on border O’s. if it is already visited then it will return else it will convert that border O into $. Then it is applying dfs on nearby neighbour elements that are basically connected with the border O.
- Finally it is converting all $ into O’s back and converting remaining O’s that are 4-directionally surrounded by X , into X.

What i have learnt from this approach:
I have learnt how to write simple and efficient code with proper comments and how to write code in a precise manner so that any user can understand for which functionality, which function is written for what purpose.