

Data Structures
Assignment 2
Deadline: 26 November 2023, 11:59 PM
Group size maximum 2 students

In this assignment you have to make a program which takes a 2D array of characters as input and searches for all the possible word in the 2D array. For example, given following input the highlighted words can be extracted

```
dogxbxxxnoon  
rhellotherex  
okciugbrownm  
wxwge1xhjij  
oozokvuxdrow  
rlxdrxextxja  
drowblonkgod
```

However, the words extracted should not only be the words appearing horizontally and vertically, but also backwards, vertically backwards, diagonally, and diagonally backward

After extracting the word save them in a file with the starting and ending position of its occurrence, for example if you find “god” the file should contain

god (7,10) (7,12)

(Hint: You will need a separate file which would help in searching the words from the 2D array)

Restriction: Your solution MUST be based on a Tree (BST or some other form of tree ADT)