Data Structures and Algorithms

HOMEWORK 5 REPORT

RUNNING COMMANDS AND RESULTS

tree form

```
root
2021
    CSE102
        LECTURE1
2022
    CSE321
        LECTURE1
        LECTURE2
2023
    CSE222
        LECTURE1
             PROBLEM1
             PROBLEM2
    CSE232
        LECTURE1
        LECTURE2
             PROBLEM1
             PROBLEM2
        LECTURE3
```

FUNCTIONS

Tree(): this function is constructor of Tree class. it constructs 2d array, children array and root string.

addChild (String node): this function adds child nodes to their parents node and checks if txt file includes more than one same nodes, it ignores and adds remaining nodes to first read node.

makeTree (Tree obj): this function converts "treeArr" list to tree structure.

readFile(): the function that reads from "tree.txt", removes then parses ';' character and it storages elements to "treeArr" list.

main(String[] args): this is a main function that operates necessary functions.