



Problem 2

Files in the file system are organized into a **tree structure**. Visualizing this structure can make finding files and directories more intuitive.

Assume that each of the following is an absolute path to a file in your file system. Draw the tree that represents the structure in the space on the left.

```
C:\Users\Ron\Documents\biography.txt
C:\Users\Ron\SoftDevI\Week01\homework.txt
C:\Users\Harry\todo_list.txt
C:\Program Files\Python\python.exe
C:\Program Files\Git\git.exe
D:\Games\WoW\wow.exe
D:\stuff.txt
```

Your instructor will determine if you should work digitally, on paper, or on a whiteboard. Use the icons to the left as references.

Problem 3

Understanding the status of the files in your repository is important! Have you made changes to any files that need to be committed? What has been added, modified, deleted, or staged since your last commit?

Consider the following commands executed in a Git repository on your computer. Together with your team, describe the status of the file at each step.

1. `notepad new_file.txt`
2. `git add new_file.txt`
3. `git commit -m "adding a new file"`
4. `git push`
5. `notepad new_file.txt (add text)`

1. `notepad new_file.txt`
created a new text file titled "new_file.txt"

2. `git add new_file.txt`
add the file new_file.txt to the staging area

3. `git commit -m "adding a new file"`
commit the file to local repository new_file.txt with the comment of "adding a new file"

4. `git push`
upload the changed file to the remote repository

5. `notepad new_file.txt (add text)`
add or edit files using notepad editor

1. Checking the status before staging is important because you can see where the files are in the staging area

2. The first thing you should do before starting a new assignment is read the directions.

3. The last thing you should do before taking a break from working is push your files to the remote repository

4. The first thing you should do on a different computer is clone your repository

Problem 4

Proper use of version control means understanding *why* we use it and not just memorizing *how* to use it.

Discuss the following questions with your team, and type or write your answers in the space on the right.

1. Why do you think that it is a good idea to check the status before staging files?
2. When starting a brand new assignment, what is the first thing you should do, and why?
3. What is the last thing that you should do before taking a break from working?
4. Assume that you are getting back to work on a different computer. What is the first thing you should do?