

## CSE 314

Offline on Shell Script

Submission Deadline: Oct 06, 2017 11:55 p.m

In this assignment, you are required to write a shell script that will take a directory path `d` as argument and recursively print a depth indented list of all files and directories in `d`. However, the argument `d` is optional and if no argument is given, a depth indented list of all files and directories in the current directory will be printed.

For example, suppose the current working directory is `/home/user/CSE314` and the output of `ls -R` is as followed:

```
.:
a.txt  dir1  dir2  dir3  my script.sh

./dir1:
b.txt  nested directory

./dir1/nested directory:
c.txt

./dir2:
e.txt

./dir3:
```

Now if your script is run with no argument, the output should be as followed:

```
|--a.txt
|--dir1
|   |--b.txt
|   |--nested directory
|       |--c.txt
|--dir2
|   |--e.txt
|--dir3
|--my script.sh
```

If the working directory is changed to some other directory and then your script is run with an argument `/home/user/CSE314`, the output should be as followed:

```
/home/user/CSE314
|--a.txt
|--dir1
|   |--b.txt
|   |--nested directory
|       |--c.txt
|--dir2
|   |--e.txt
|--dir3
|--my script.sh
```

For more clarification, install a program `tree` by running

```
sudo apt-get install tree
```

Then run the command `tree` with or without arguments and see the results.

Remember that, for your assignment, it is not necessary to print the names with different colors, but the printing format and indentation shown in the examples must be followed. All the files and subdirectories in any directory must be listed in lexicographical order.