Project 2

Submit Assignment

Due Friday by 11:59pm **Points** 100 **Submitting** a file upload

lab2-1.c (https://canvas.txstate.edu/courses/1658960/files/179512735/download?download_frd=1)

Write a small shell - called shhh - that has the
following capabilities:

1. Can execute a command with the accompanying arguments.
2. Recognize multiple pipe requests and handle them.
3. Recognize redirection requests and handle them.
4. Type "exit" to quit the shhh shell.

Sample commands:

shhh>ls

shhh>ls -t -al

shhh>cat file.txt (file.txt is an existing file)

shhh>ls -al > output.txt

And then open output.txt to see if the content is correct or not

shhh> ls | more | wc

shhh>./pre < input.txt | ./sort > output.txt (./pre and ./sort are the executable from proj1.
input.txt is the file that provides the input
and output.txt is the output file)

shhh> exit

The shell shhh should always wait for ALL the
commands to finish. The topology of the forked processes
should be linear children; e.g the shell should have
as many children as there are processes needed -
with pipes connecting adjacent children.You may assume
that any redirection in the command
is specified like the third example above. E.g.
"redirection in" (<) is always specified before
the first pipe appears and "redirection out" (>)
is always after the last pipe specified. To make
life easier for you, you may assume that only
commands with correct syntax are typed in. In other
words don't worry about errors in the formation of
the commands.

The partial program is available in CANVAS, lab2-1.c.
The command parsing part is already done in the program.
On your part, you need to implement the above functions.

Submission:

In order not to lose any files, you'd better zip all your files into a .zip file.

Submit your project to CANVAS before the deadline. Homework will NOT be accepted
through emails. You should write a readme textfile telling the grader how to run
your programs. Without this file, it is very likely that your project will not be
run properly.