CSCI 3150 Introduction to Operating Systems
Assignment One
Deadline: 23:59, Oct. 16, 2022
Total Marks: 100

This is a group assignment; each group can have up to 3 members and only need to submit one assignment by one member (by including all group members' names). Please download Assign1.zip from the Blackboard. Following the instruction in Readme, youcan find a simple shell program that can interpret and execute a command inputted.

In Assignment One, you are required to revise function shell_execute() in simple-execute.c, so the program can execute commands with up to **two** pipes. Basically, your program should be able to handle the case in which there is at least one space before or after "|" such as:

> $$$ ls -l | grep D | wc -l
> $$$ ls -l | grep D

If there is no space between or after "|", for example, for the following case: $$$ ls| "ls|" is treated as one argument to be executed (rather than "ls" and "|").

Note:

1) We will run your code on the virtual machine environment – XUbuntu (32bits) via Virtual Box – when grading. So please make sure your program can be compiled and run on it; otherwise, you may get 0 marks.
2) Note that we can only grade what you submit in the Blackboard. Late submission will be graded based on our late submission policy (based on the submission time in the Blackboard). Several new test cases will be utilized when grading.
3) Tutor Zelin DU is in charge of this assignment and you may contact him via Zelin via email: 1155187968@link.cuhk.edu.hk.

Submission: You only need to submit simple-execute.c that will be compiled with the same "Makefile" and evaluated with several test cases.