

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI K. K. BIRLA Goa Campus
First Semester 2019-2020
CS G623 Advanced Operating systems
Lab Assignment No. 2, 23rd August 2019
Submission Deadline: 5th Sep 2019

Lab Assignment 2

Design your own Shell interpreter in C to simulate the following commands

1. README file: Name, ID, how to execute, which files are present, who you have interacted with their name and ID, brief explanation of each function, which online resources you have used mention them.
2. Menu driven to list the commands supported by your command line interpreter
3. Man page for each command: This should open a text file with details about the command and the options provided
4. Entry and Exit commands to enter and exit the shell
5. History : This command should display previous 10 commands with following format.
 < command name date time status (success/failed) >
6. Any command with executable like ls -l : this should include parsing of command and the concept of fork and exec system call.
7. PWD: this should display the path of present working directory
8. FIND <file name>: this should work like grep command. It should search for the given file in the present working directory.
9. CD <dir name> : this command should change the directory to the one mentioned in the command.
10. Any 2 commands with pipe like ls | grep: This should include the concept of dup system call. The execution of both the commands must be maintained in the history.

Expectation: do not plagiarize, program should be modular with proper indentation, well commented, complete and correct implementation of all above commands, submitted before the deadline. If it is observed that someone has copied code from their classmates or seniors then they will get negative marks for the assignment meaning 10 marks assignment will fetch them -10 marks. 0 is always better than negative marks.