

Semi Design

find you way in #VLSI with us

Linux

1. Introduction to OS and Linux OS
2. Linux File System: files and directories
 - a. Basic Linux commands for files and directories
 - b. OS related files and directory structure
 - c. Hard disk views
 - d. Conventions, file types, user types and ownership
 - e. Accessing directories and files: absolute vs. relative path
 - f. File permissions (security): knowing and changing
3. All about redirections and filters
 - a. Redirections - <, >, >>, |
 - b. Filters like: grep, wc, cut, tr, tee, find
4. All about text editors
 - a. Vi, vim (extended version of vi)
 - b. Emacs
 - c. Gedit
5. Shell Programming (scripting and automating tasks)
 - a. Bash shell and echo command
 - b. Bash scripting and comments
 - c. Local variables and shell debugging
 - d. Global variables – export command
 - e. Environment variables and customizing shell environment
 - f. Expressions, expr command, command substitution
 - g. Arithmetic operators, conditions, test command
 - h. Number / strings, file/dir testing conditions
 - i. Conditional control – if, if - else, if – elsif, nested if, case
 - j. Logical test operators – and (-a, &&), or (-o, ||), not (!)
 - k. Repetitive tasks – for, while, until, select, break, continue
 - l. Parameter handling
6. Advanced Linux
 - a. Advanced linux commands
 - b. Functions
 - c. Signal interrupts and traps
 - d. Sed – pattern searching, replacement, editing
 - e. Awk – pretty printing
 - f. Make utility – Makefile writing
7. Practice Exercises