Linux Crash Course Syllabus

Saturday – Basic Linux Administration
- Understanding of Linux?
- What is Oracle Virtual Box?
- Oracle Virtual Box Installation
- Creating virtual machine
- Linux Distributions
- Linux Installation
- Download and install Putty
- Connect Linux VM via Putty
- Changing Password *(passwd)*
- Introduction to File System
- File system structure description
- File system navigation commands *(cd, pwd, ls)*
- Directory listing overview
- Creating Files and Directories *(echo, touch, vi, cp, redirects > and >>)*
- File Permissions *(chmod)*
- File Ownership *(chown, chgrp)*
- Getting Help *(man, whatis etc.)*
- Adding text to file
- Pipes *(|)*
- Quiz, Homework and Handouts

Sunday – Advance Linux Administration
- File Maintenance Commands
- File Display Commands
- Filters / Text Processing Commands *(cut, sort, grep, awk, uniq, wc)*
- Finding System Information *(uname, cat /etc/redhat-release, cat /etc/*rel*, dmidecode)*
- Linux File Editors *(vi text editor)*
- User account management *(useradd, groupadd, usermod, userdel, groupdel)*
- Switch users and Sudo access
- System utility commands *(date, uptime, hostname, which, cal, bc etc.)*
- Processes and schedules *(systemctl, ps, top, kill, crontab and at)*
- OS Maintenance Commands *(shutdown, reboot, halt, init etc.)*
- System Monitoring Commands *(top, df, dmesg, iostat 1, netstat, free etc.)*
- Shell scripting
- Basic Shell scripts
- Aliases *(alias and unalias)*
- Command **history**
- Enabling Internet in Linux VM
- Network Files and Commands *(ping, ifconfig, netstat, tcpdump, networking config files)*
- System Updates and Repositories *(rpm and yum)*
- System Run Levels
- Quiz, Homework and Handouts