**LINUX ADMIN COURSE**

1. **HISTORY OF OPERATING SYSTEMS**

* History of Unix
* History of Linux
* Difference between Windows and Linux
* Type Of Operating System
* ARCHITECTURE OF UNIX

1. **LINUX OPERATING SYSTEM INSTALLATION**

* CentOS 7.0

1. **MANAGING THE FILE THROUGH CLI**

* Linux file system hierarchy
* Managing files using command-line
* Specifying Files By Name

1. **COMMANDS**

* Basic Commands
* Filter Commands
* Types Of Files (-,d,l,b,c)
* MAN Command

1. **CREATING, VIEWING AND EDITING TEXT FILES**

* GUI and CLI Editors
* Gedit command
* Visual Display Editor
* Visual Display Editor Improved
* Redirecting Output to Files

1. **SYMBOLIC LINK**

* Soft Link
* Hard Link

1. **LOCAL USER AND GROUP MANAGEMENT**

* Creating Local User and Groups
* Adding users into groups
* Password management of User and Groups
* Changing System Defaults settings

1. **USER SECURITY WITH SUDO**

* Providing SUDO Access to The Normal user
* Different Type Of Ex

1. **CONTROLLING FILE PERMISSIONS**

* Linux File System Permissions
* Managing file system permissions with CLI
* Special Permissions (SUID, SGID, Sticky)

1. **ACCESS CONTROL LIST**

* ACLs
* Default ACLs

1. **MANAGING THE LINUX OS PROCESSES**

* Controlling JOBS
* Killing Processes
* Monitoring Processes
* Assignee Priority to the Processes

1. **MANAGING SERVICES AND DAEMONS**

* Controlling System Services
* With systemctl

1. **NETWORKING CONCEPTS**

* Requirements of network implementation
* IPV4 Address
* Ip address assignment
* Nmtui and nmcli commands
* ISO Layers

1. **CONFIGURING OPEN SSH**

* Open SSH Authentication
* Key Based Authentication
* Generating Public and Private keys

1. **ARCHIVING AND BACKUPS**

* Compress tar Archiving
* Transferring Files between Systems
* Using scp, ftp, rsync

1. **INSTALLING AND UPDATING SOFTWARES**

* Installing and updating packages with RPM
* Creating Yum repos
* Installing and updating packages with YUM

1. **LINUX FILE SYSTEM**

* Identifying File systems
* Mounting and Unmounting File System
* Locating file system

1. **DISK MANAGEMENT**

* Creating and managing Partitions
* Changing Partition Type (Hexa Code)
* Manage Swap Partitions

1. **LOGICAL VOLUME MANAGEMENT**

* PV create, VG create, LV create
* LV extend/reduce
* VG extend/reduce

1. **CONTORTING THE BOOT PROCESS**

* Root password recovery
* Changing the targets
* Boot process 6.0,7.0 and 8.0

1. **BASIC BASH SCRIPTING**