Ansible with Basic Python

Duration: 4 Days

Hands-On Format: This hands-on class is approximately 60/40 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

Prerequisites: Basic knowledge of Linux commands

Module 1 – Introduction to Python

Python intro
Installing python
Python 2 vs Python 3
Python syntax and comments
Python variables
Input in Python

Module 2 – Data types & Operators

Numbers and Strings
List, tuples and sets
Dictionary & Range
Arithmetic and Assignment operators
Comparison and Logical operators
Identity, Bitwise and Membership operators

Module 3 – Conditions & loops in Python

If, elif & else
Shorthand if else (Ternary operator)
Nested if
Pass statement
Python while loop
For loop in python
Break & Continue statement

Module 4 – Functions and Modules

Python inbuilt functions
Arguments
Creating own functions
Lambda function
Return statement
Inbuilt Modules
Creating own modules
Variables in module
Re-naming a module

Module 5 – Introduction to Ansible

Ansible Concepts
How ansible works
Install Ansible
Infrastructure as a code (IAC)
Ansible Commands
Ansible Modules

Ad-HOC Execution

Module 6 – Playbooks, variables & facts

Automate tasks with playbook
Run playbook on multiple hosts
Use Variables in Playbook
Simplify Management
Ansible facts
Gather managed hosts information

Module 7- Ansible Task Control & Roles

Handlers
Playbook Task errors
Ansible roles
Reuse ansible code

Module 8 – Linux Administration tasks

Managing users with ansible
Managing packages with ansible
Managing storage with ansible