

Linux

- accessibility
- text editors
- creating users and groups
- creating,moving and deleting a file
- permissions,umask
- package management(apt-get,yum,dpkg,rpm)
- bash shell configuration file & shell variables
- searching files in linux
- streams,redirects,awk,grep,
- data storage
- setting up passwordless ssh
- sshd config file

Intro to Devops/Config Management

- SDLC & CI/CD
- overview about jenkins
- Jenkins and Maven integration
- Creating jobs using Jenkins
- Parametrized Project builds
- Jenkins Slaves with Docker

AWS

- IAAS,PAAS,SAAS & Virtualization
- Intro to AWS Offerings
- setting up EC2
- EBS & Launching a website using S3
- Autoscaling , SNS,CloudWatch
- Creating an AMI

- ips and subnets
- Setting up a VPC & NAT Gateways
- Cloud formation intro

Vagrant Basics

- vagrant introduction
- vagrant installation
- vagrant getting started
- vagrant boxes
- vagrant plugins
- vagrant provisioning
- Customizing Boxes
- vagrant packaging

Docker

- Container management
- Building an Image
- Dockerfile directives
- Port Forwarding
- Docker volume/networking
- Pushing Docker images to cloud
- Communication between Docker Containers

Chef

- overview
- setting up chef environment
- chef terminology
- overview of resources and actions

- writing a cookbook to install git
- knife commands and knife.rb
- understanding chef run
- writing a cookbook to install lamp
- attributes
- writing a cookbook to install apache and start tomcat
- metadata.rb
- test kitchen
- food critic,rubocop

Ansible

- setting up ansible environment
- Inventory
- YAML
- Hosts
- Tasks
- Tags
- Plays
- Playbook Execution
- Conditionals and Jinja
- Modules
- Roles and Use Cases
- Manage Docker containers with Ansible
- Terraform essentials

NOTE: The order might vary a little bit and pre class work will be given before the classes and if required homework will also be given and candidates are required to trouble shoot.