

## Day - 1

### Course Introduction

- Overview of the course structure and objectives
- Introduction to HashiCorp and Terraform

### Infrastructure as Code (IaC) Concepts

- Principles of Infrastructure as Code
- Benefits of using Terraform for IaC

### Getting Started with Terraform

- Installation and configuration
- Understanding Terraform's architecture (Providers, Resources, and State)
- First Terraform configuration example

### Terraform Basics

- Variables, Outputs, and Data Sources
- Working with Terraform Configuration Files

### Terraform Commands and Workflow

- terraform init, terraform plan, terraform apply, terraform destroy
- Understanding the Terraform workflow

### Q&A and Recap

- Open discussion and questions
- Review key concepts learned

## Day - 2

### Working with Modules

- Introduction to Terraform modules
- Creating and using modules in configurations

### State Management

- Understanding Terraform state files
- Remote state storage options (S3, Terraform Cloud, etc.)

### Provisioners and Backends

- Using provisioners for resource configuration
- Configuring backends for state management

### Hands-On Lab: Creating Infrastructure

- Practical lab: Building a multi-tier application using Terraform
- Apply best practices for code organization

### Q&A and Recap

- Open discussion and questions
- Review key concepts learned

### **Terraform Cloud and Enterprise**

- Overview of Terraform Cloud and its features
- Collaborating with Terraform in team environments

### **Best Practices for Terraform**

- Coding standards and best practices
- Handling errors and troubleshooting common issues

### **Practice Exam**

- Take a practice certification exam
- Review questions and discuss solutions

### **Final Review and Exam Preparation**

- Key topics to focus on for the exam
- Tips for passing the certification exam

### **Q&A and Course Wrap-Up**

- Open discussion and final questions
- Course feedback and next steps for certification