

# HashiCorp Certified: Terraform Associate

## Day 1

### Infrastructure as code concepts and how Terraform fits in (65 minutes)

- Presentation: Introduction to exam; tips and tricks
- Q&A
- Presentation: What is IaC?; advantages of IaC patterns
- Group discussion: Applying IaC to different use cases
- Presentation: What's Terraform?; benefits of Terraform
- Q&A
- Break

### Terraform basics (65 minutes)

- Presentation: Terraform and provider installation options; using the Terraform CLI; using the basic concepts and syntax; Terraform's typical workflow
- Hands-on exercises: Install Terraform; implementing a simple scenario
- Q&A
- Break

### Input variables and outputs (110 minutes)

- Presentation: Defining and referencing a variable; Terraform data types; local values; defining an output value; validating the configuration
- Hands-on exercises: Use variables; use local values in configuration; render an output value on the console; validate and fix an incorrect configuration
- Break
- Presentation: Supplying input values
- Hands-on exercise: Pass input values through various options
- Q&A

## Day 2

### Using providers (65 minutes)

- Presentation: Providers type, source, and version; using providers; discovering providers; planning and defining dependencies; post-deployment providers
- Hands-on exercises: Add a provider to the configuration; declare an explicit dependency; define a post-deployment action
- Q&A
- Break

### Flow control and expressions (65 minutes)

- Presentation: Defining loops for different data structures; using built-in functions; using the Terraform console to test expressions
- Hands-on exercises: Declare a loop; declare a function
- Q&A
- Break

### **Interacting with modules (55 minutes)**

- Presentation: Benefits and use cases for a module; inner workings of a module; module structure and syntax; discovering modules from the public Terraform registry
- Hands-on exercise: Implement a custom module
- Q&A
- Break

### **Terraform cloud and enterprise capabilities (50 minutes)**

- Presentation: Defining different environments with workspaces; Terraform Enterprise workspaces features; Terraform Cloud features
- Exercise: Configuring multiple environments
- Q&A