Introducing Infrastructure as a code

- Introduction to IaC
- Introducing and Installing Terraform
- Choosing IDE

Deploying Infrastructure with Terraform

- Understanding Providing
- Understanding Resources
- Launching and Destroying Resources on Cloud
- Understanding Terraform State File
- Understanding Desired and Current States
- Provider Versioning
- Understanding Attribute and Output
- Terraform Variables
- Variable Data Types
- Lists and Dictionaries
- Count and Count Index
- Conditional Statements
- Local Values
- Functions
- Data Sources
- Debugging
- Load Order and Semantics
- Dynamic Blocks
- Tainting Resources
- Splat Expressions
- Terraform Graph

Provisioners

- Understanding Provisioners
- Types
- Implementing remote-exec, local-exec, creation-time and destroy-time provisioners
- Failure Behavior

Modules and Workspaces

- Understanding DRY principle
- Terraform registry
- Terraform workspace

Remote State Management

- Integrating with GIT for team management
- Security Challenges
- Module Sources
- Remote State Management
- Implementing S3 Backend
- State File Locking
- Integrating DynamoDB
- Terraform state management
- Importing Existing Resources

Security

- Handling Secrets
- Sensitive Perimeter

Terraform Cloud and Enterprise

- Introducing Terraform Cloud
- Creating Infrastructure with Terraform Cloud
- Introducing Remote Backend's

1. Best practices for backing up state files in either azure or aws cloud.