

Terraform 7-Day Study Plan

Day 1: Terraform Basics

- What is Terraform & why it's used
- Declarative vs Imperative IaC
- Providers (AWS, Azure, GCP)
- Terraform workflow: init, plan, apply, destroy
- Installing Terraform

Practice: Install Terraform and create your first .tf file

Day 2: First Infrastructure on AWS

- AWS provider setup
- provider, resource, variable blocks
- Use aws_instance to launch EC2

Practice: Launch EC2 and output public IP

Day 3: Variables, Outputs, and Data Sources

- variable, default, description
- output block
- data block (fetch existing resources)
- terraform.tfvars

Practice: Use variables and data sources

Day 4: Terraform State and Backend

- terraform.tfstate and .tfstate.backup
- Remote backend (S3), Locking (DynamoDB)

Practice: Move state to S3 with DynamoDB locking

Day 5: Modules

- What are modules?
- Writing and using local modules
- source, inputs, outputs
- Terraform Registry modules

Practice: Create EC2 module and use it

Day 6: Provisioners and Lifecycle Rules

- remote-exec, local-exec
- connection block
- depends_on, lifecycle, create_before_destroy

Practice: Install Apache using remote-exec

Day 7: Advanced Features + Real Project

- Tainting, Importing, Targeting
- Count vs for_each
- Workspaces
- Best practices

Final Project: Provision VPC, Subnets, EC2, SG with variables, modules, and remote state