Training Plan for 9 weeks -

Week 1

**Day 1**

* Clone your provided repository to your private server and try pushing one sample file.
* Please go through the below document for steps to clone your repository to your private server

**Day 2**

* Go through the linux basic course
* Practice commands of linux like - Linux storage commands , Linux network commands and Linux basic commands like cut, sed, tr, grep, uniq, vi, top, ps, htop, df, awk, export, set, unset, crond .
* Document the commands which you have used and their use cases

**Day 3**

* Go through the shell scripting course
* Practice the basic shell scripts on your private server
* Push the codes which to your bit bucket of the codes which has been practiced

**Day 4**

* Try to solve the shell script question no 1 provided in the bit bucket link - [setupInstructions/Question at master · munireddy/setupInstructions](https://github.com/munireddy/setupInstructions/blob/master/Question)
* Go through the advanced commands and concepts in git like - merge conflicts and rebase

**Day 5**

* Solve the shell script question provided below -

**Script to monitor all unmodified files in the last x time and delete those files if there extension is .log .zip**

Week 2

**Day 1, Day 2**

* Go through the python course provided below -

**Day3 -**

* Practice the basic python scripts which were learnt from the course
* Push the code to bit bucket which were practiced.

**Day 4**

* Try to solve the question number 2 which is provided the below bit bucket link -

[setupInstructions/Question at master · munireddy/setupInstructions](https://github.com/munireddy/setupInstructions/blob/master/Question)

* Push the solution/code to the bit bucket

**Day 5**

* Install AWS cli in your private server and try some basic AWS cli commands.

Week 3

**Day 1 , Day 2,**

**Go through the Introduction to cloud computing on AWS**

**Day 3**

* Try to list the AWS resources using AWS cli

Week 4

**Day 1 ,Day 2**

* Try to launch and destroy the aws resources listed below using cli -

resources list - EC2, S3, Loadbalancers, route 53, VPC peering, Security groups, Cloud watch monitoring

**Day 3**

* Create one s3 bucket and copy file to s3 bucket using AWS cli.
* Create and destroy lambda using AWS cli

**Day 4**

* create/destroy IAM roles and modifying the policy documents, assume roles using AWS cli.
* create alarms for EC2 instance, CPU usage using AWS cli.
* Create cloud formation for launching an ec2 instance.

**Day 5**

* Install terraform in your private server.

Week 5

**Day1, Day 2**

* Go through the terraform course provided below -

**Day 3**

* Using terraform create VPC

**Day 4**

* Create s3 bucket using terraform and try pushing [terraform.tf](http://terraform.tf/) state file to s3 bucket.
* Try Vpc peering using terraform.

**Day 5**

* Create ELB(loadbalancer) using terraform.

Week 6

**Day 1, Day 2**

* To create a High Availability fault tolerant architecture using terraform deploy wordpress application. Follow up with creating Route53 records so the application is accessible over Route53 DNS .

**Day 3**

* Using Terraform, create secured static website on S3

**Day 4, Day 5**

* Using Terraform deploy a flask application

Week 7

**Day 1**

* Explore data blockers and provisoners in Terraform
* Using data blocker launch an ec2 instance with existing VPC and security groups.

**Day 2**

* Explore functions and modules in Terraform.
* Define a module that creates VPC and use that module to launch an ec2 instance.

**Day 3, Day 4**

* Go through the Jenkins course provided below -

**Day 5**

* Try installing Jenkins on your private server and run some basic pipeline Jenkins jobs which are included in the course.

Week 8

**Day 1**

* Go through the docker course which is provided below -

**Day 2, Day 3**

* Create docker image for an app, deploy the app in a newly created network, do not use default network.

**Day 4, Day 5**

* Go through the Kubernetes course which is provided below.

Week 9

Day1

* Install Minikube on the VM and deploy the nginx application on the nodes which are provided by Minikube

**Day 2**

Explore Ansible, go through the course on the below link.

**Day 3, Day4**

* Setup Ansible on a VM i.e master and slave setup.
* Create Ansible playbook to install WordPress application.