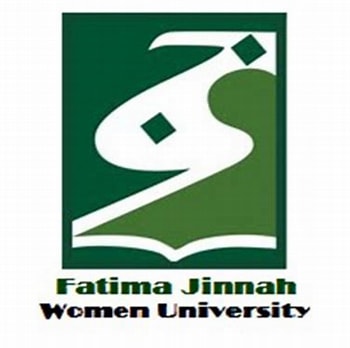
CLOUD COMPUTING

LAB 12



Submitted To:

Engr. Shoaib

Submitted By:

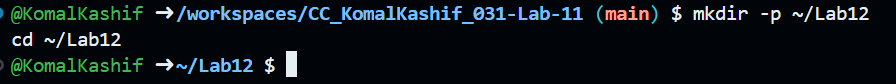
Komal Kashif

BSE V-A

2023-BSE-031

**Task 1 — Organize Terraform code into separate files**

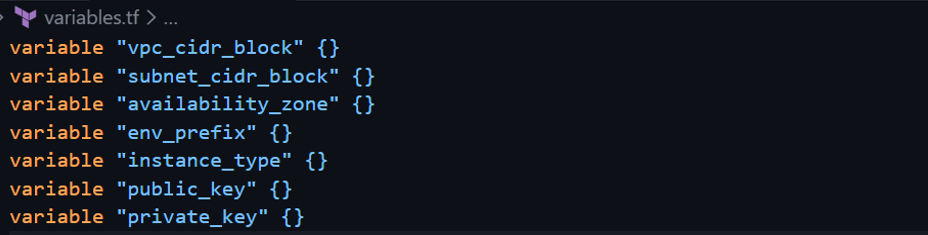
task1\_project\_directory.png



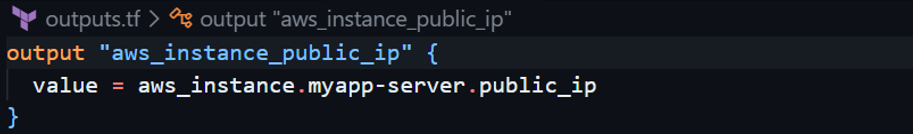
task1\_files\_created.png



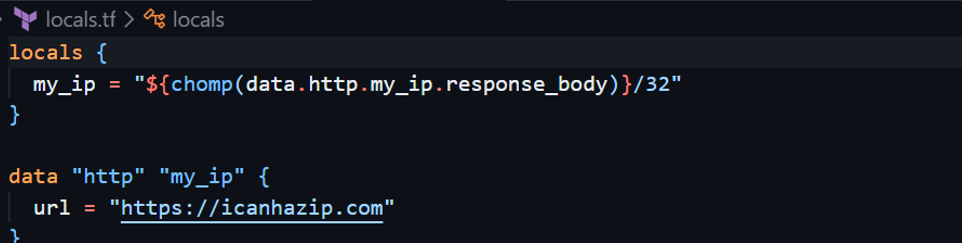
task1\_variables\_tf.png



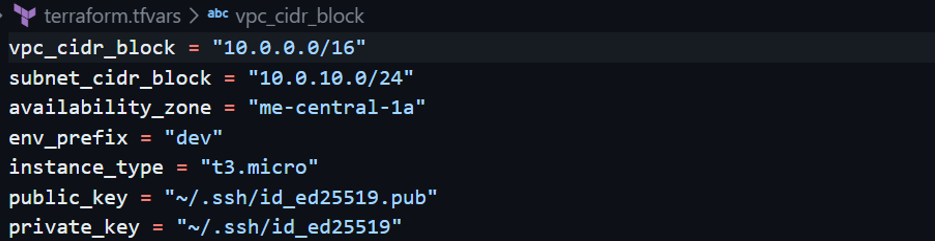
task1\_outputs\_tf.png



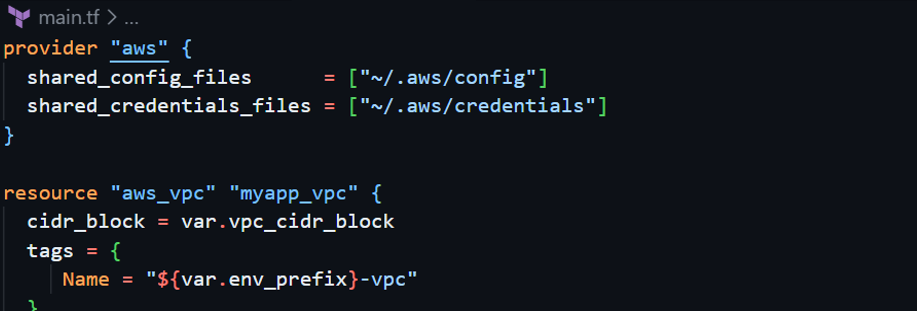
task1\_locals\_tf.png



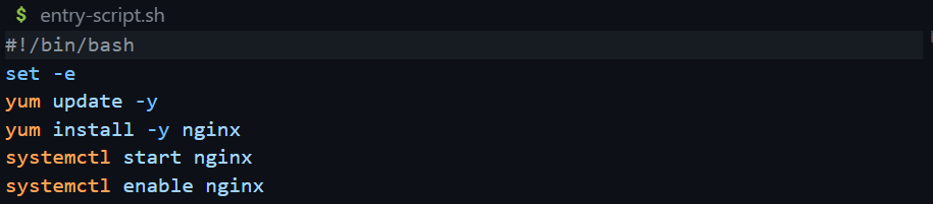
task1\_terraform\_tfvars.png



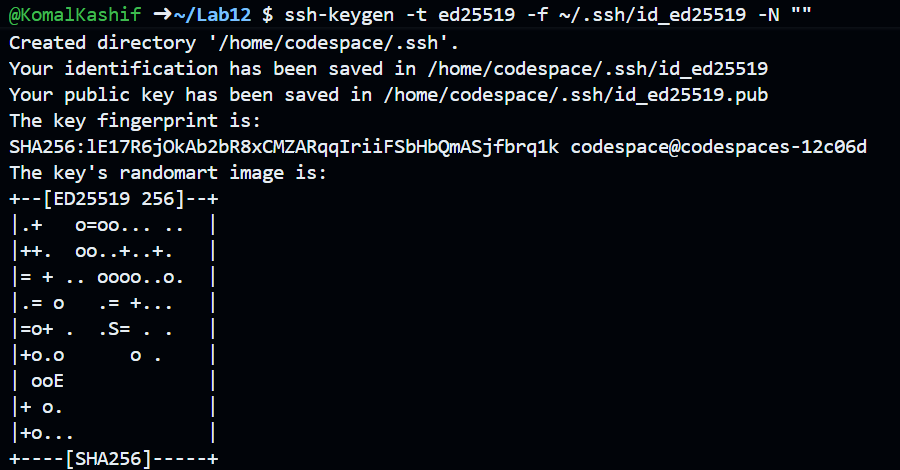
task1\_main\_tf.png



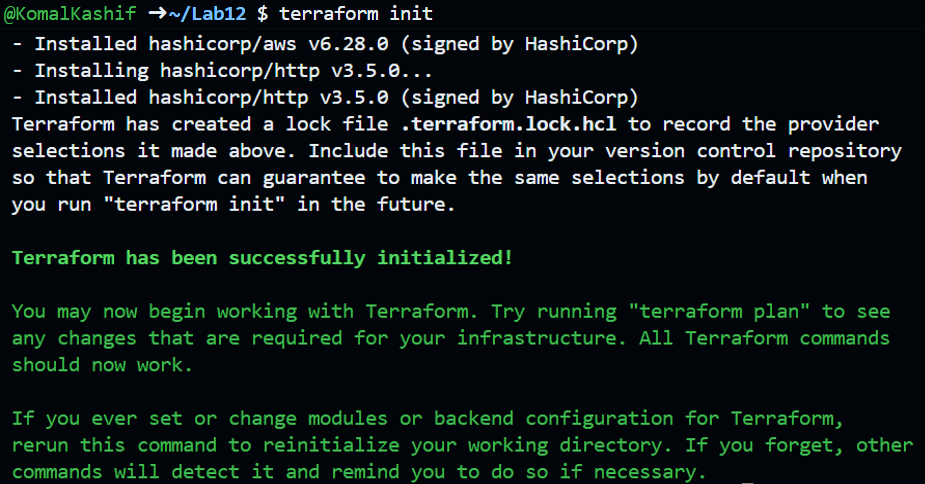
task1\_entry\_script.png



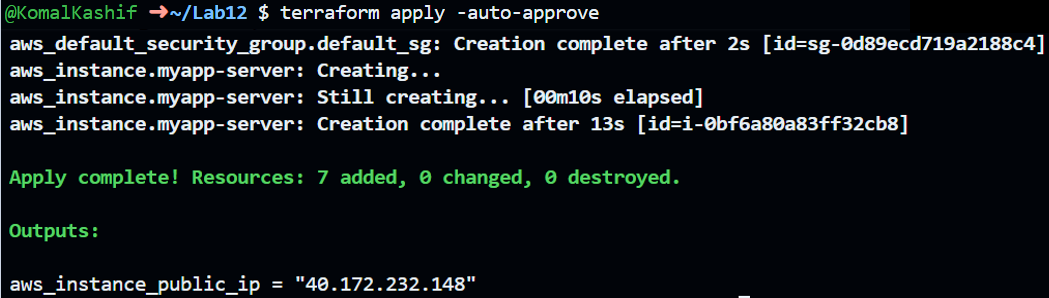
task1\_ssh\_keygen.png



task1\_terraform\_init.png



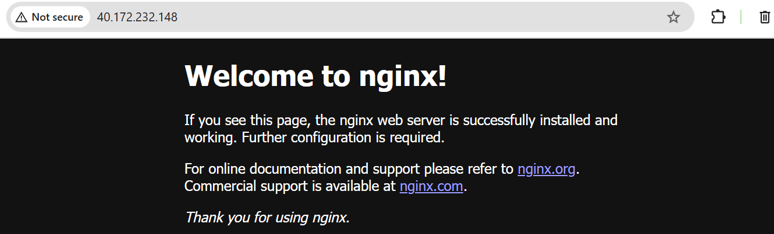
task1\_terraform\_apply.png



task1\_terraform\_output.png



task1\_nginx\_browser.png

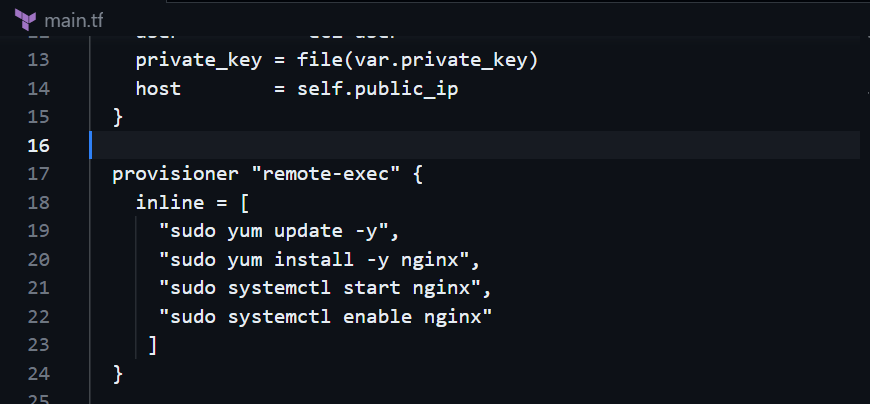


task1\_terraform\_destroy.png

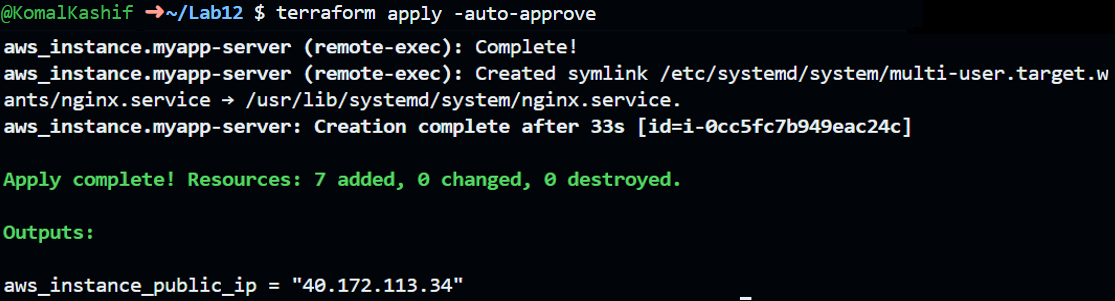


**Task 2 — Use remote-exec provisioner**

terraform apply -auto-approve



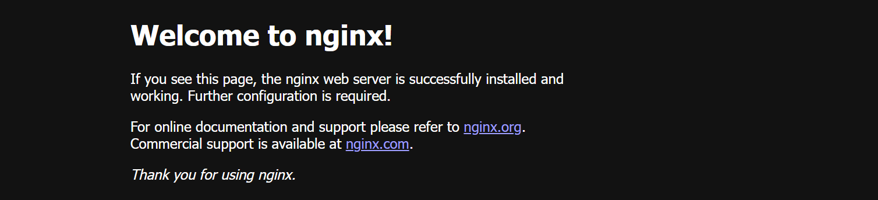
task2\_terraform\_apply.png



task2\_terraform\_output.png

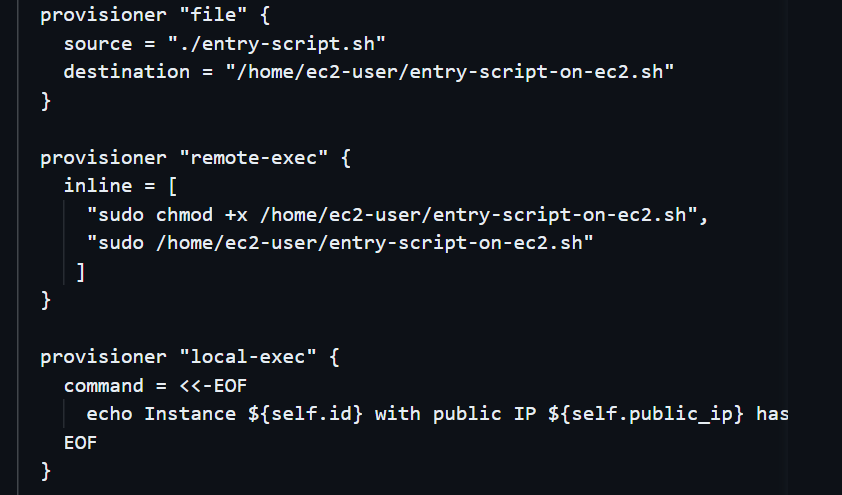


task2\_nginx\_browser.png

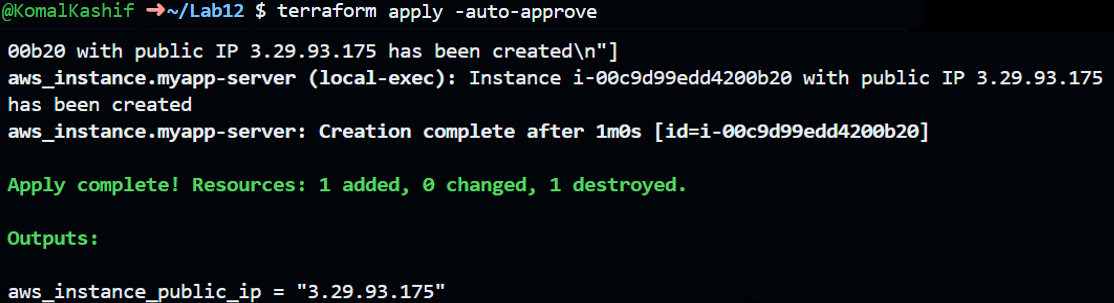


**Task 3 — Use file and local-exec provisioners**

task3\_main\_tf\_all\_provisioners.png



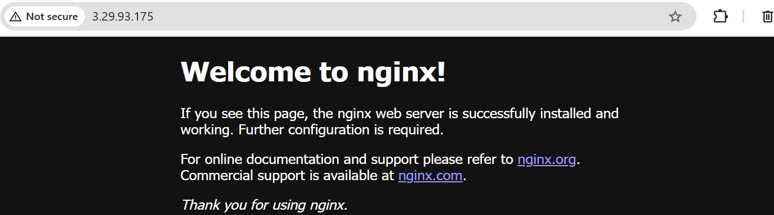
task3\_terraform\_apply.png



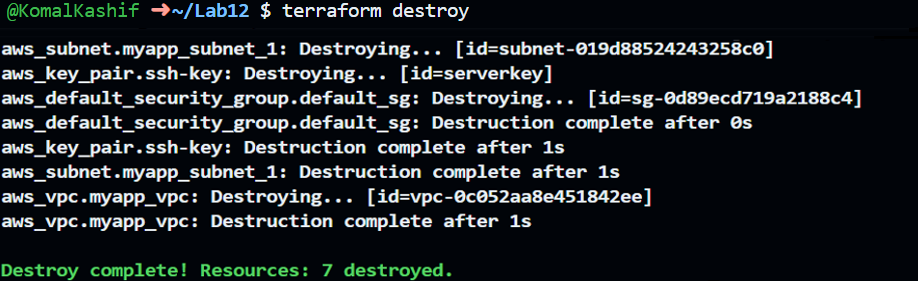
task3\_terraform\_output.png



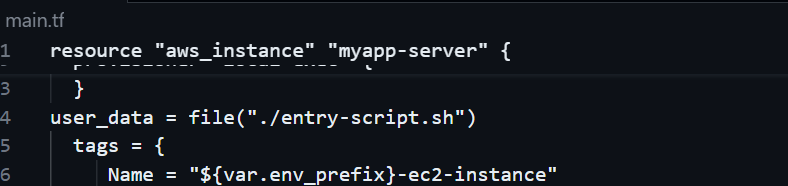
task3\_nginx\_browser.png



task3\_terraform\_destroy.png

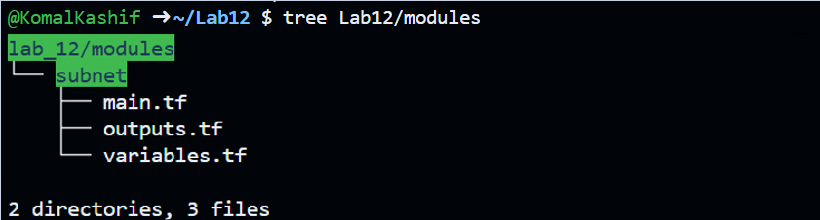


task3\_main\_tf\_restored.png

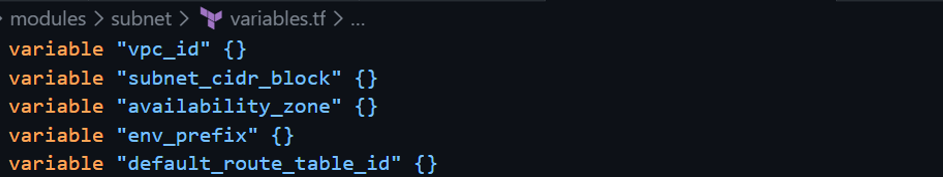


**Task 4 — Create Terraform modules**

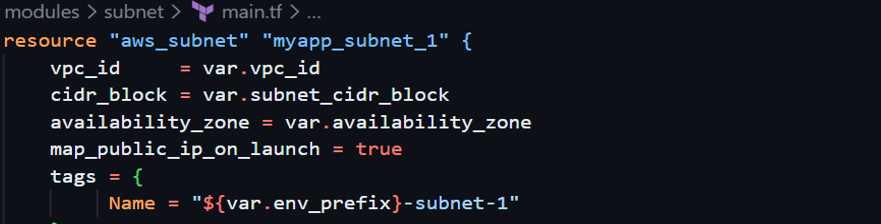
task4\_module\_structure.png



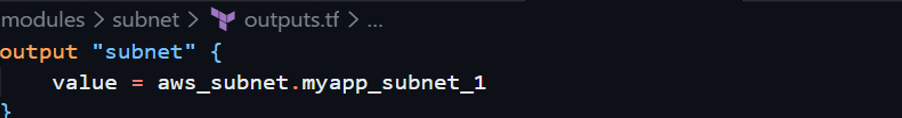
task4\_subnet\_variables.png



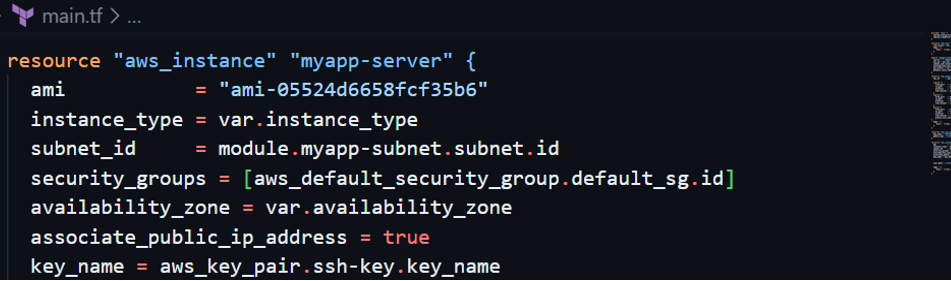
task4\_subnet\_main.png



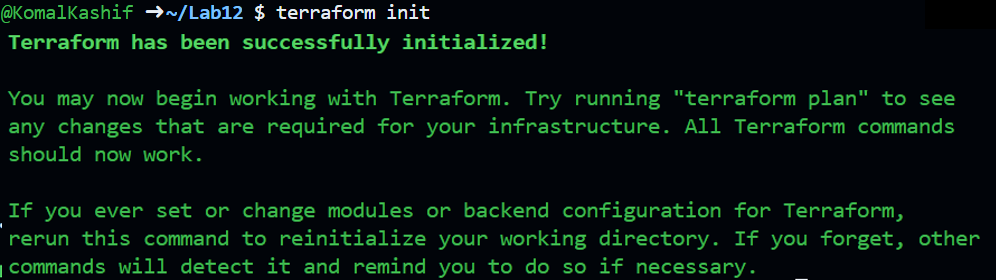
task4\_subnet\_outputs.png



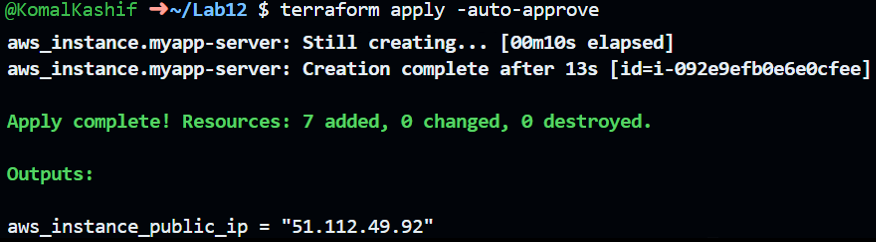
task4\_main\_tf\_with\_module.png



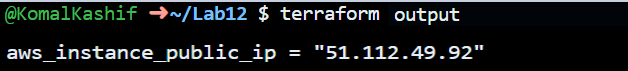
task4\_terraform\_init.png



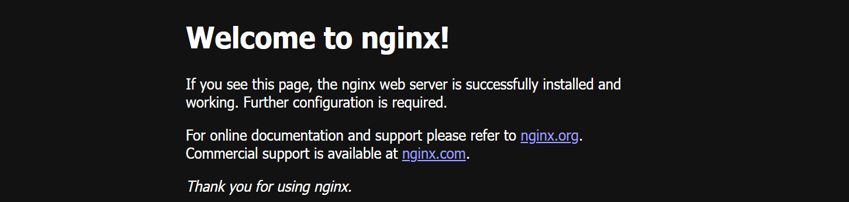
task4\_terraform\_apply.png



task4\_terraform\_output.png

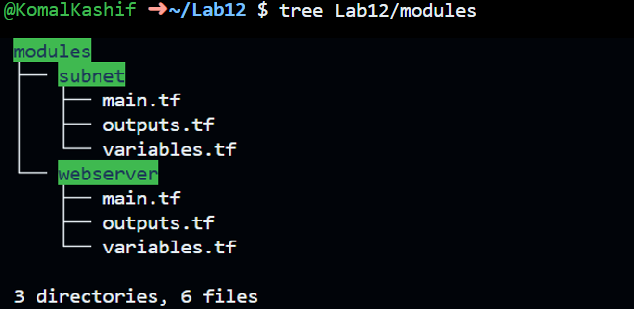


task4\_nginx\_browser.png

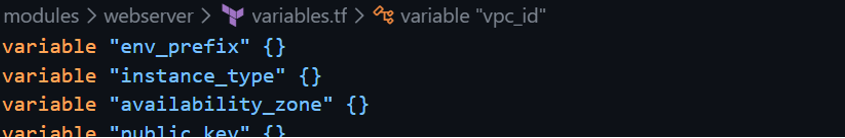


**Task 5 — Create webserver module**

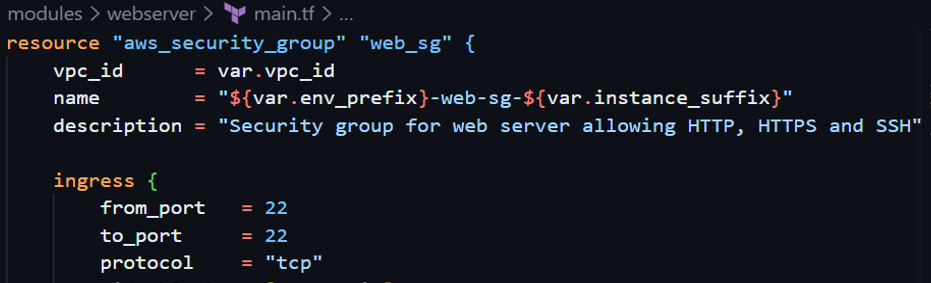
task5\_webserver\_module\_structure.png



task5\_webserver\_variables.png



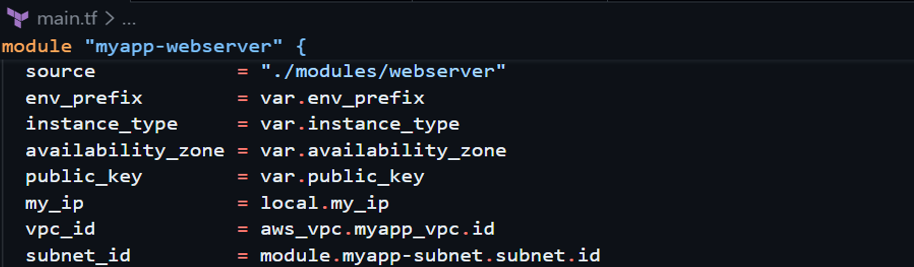
task5\_webserver\_main.png



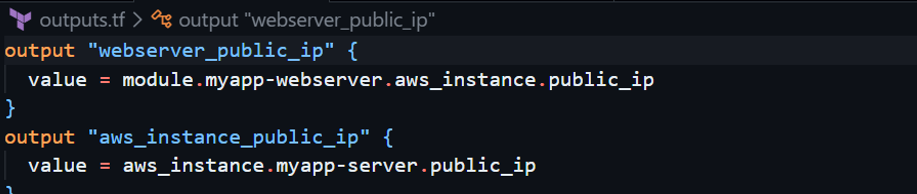
task5\_webserver\_outputs.png



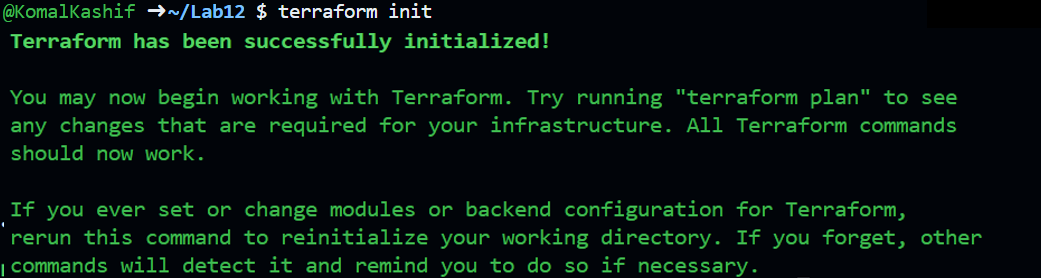
task5\_main\_tf\_webserver\_module.png



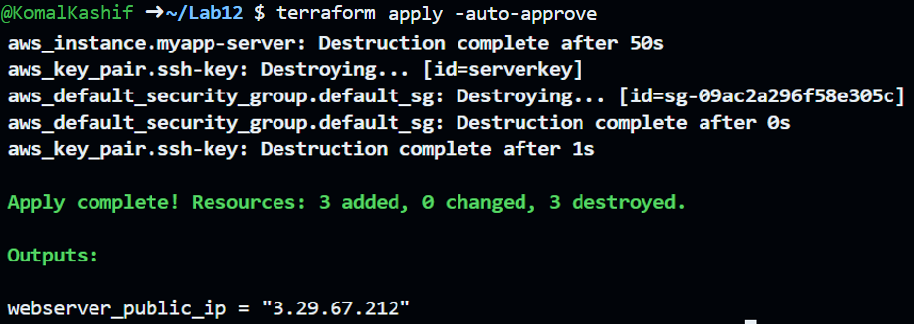
task5\_outputs\_updated.png



task5\_terraform\_init.png



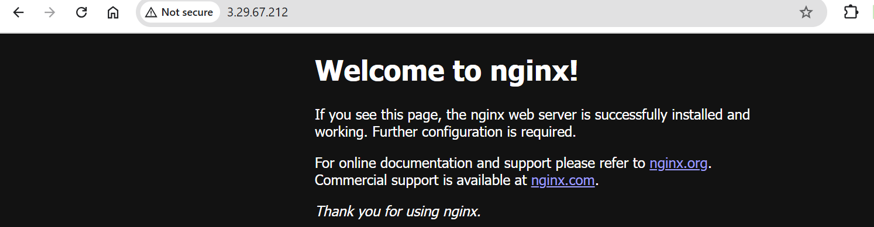
task5\_terraform\_apply.png



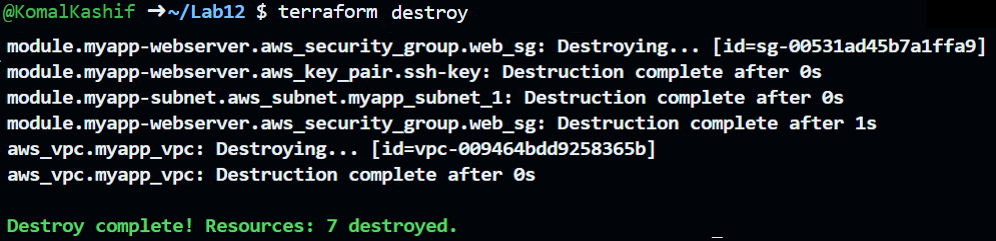
task5\_terraform\_output.png



task5\_nginx\_browser.png

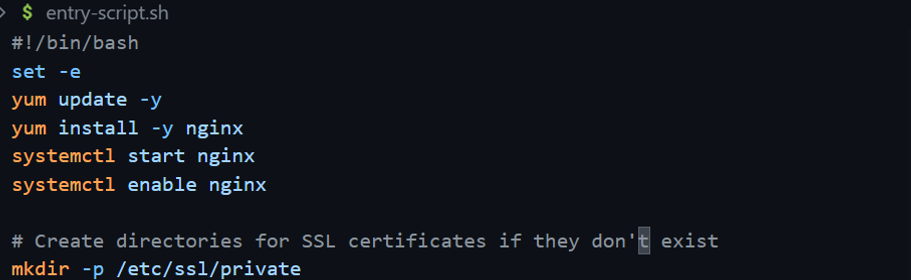


task5\_terraform\_destroy.png

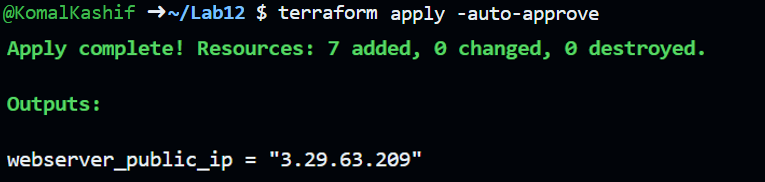


**Task 6 — Configure HTTPS with self-signed certificates**

task6\_entry\_script\_https.png



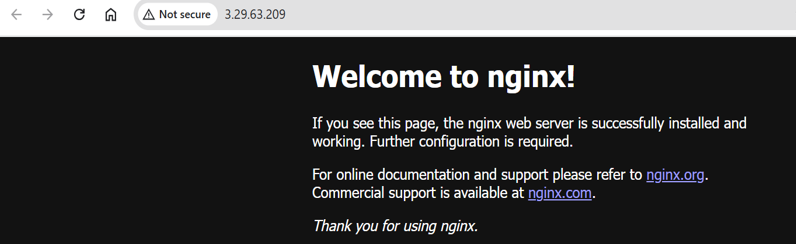
task6\_terraform\_apply.png



task6\_terraform\_output.png



task6\_http\_redirect.png

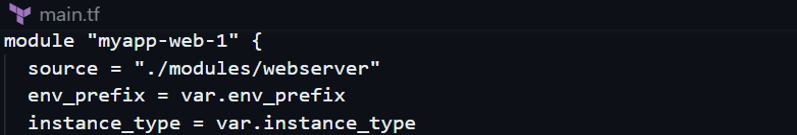


**Task 7 — Configure Nginx as reverse proxy**

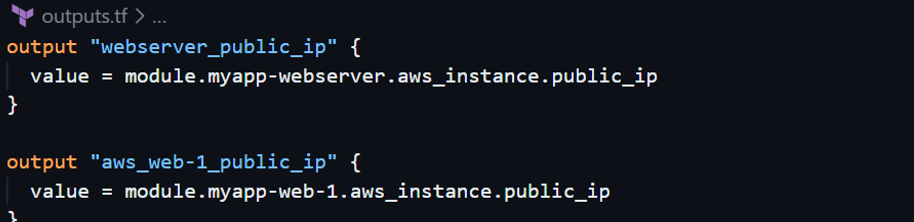
task7\_apache\_script.png



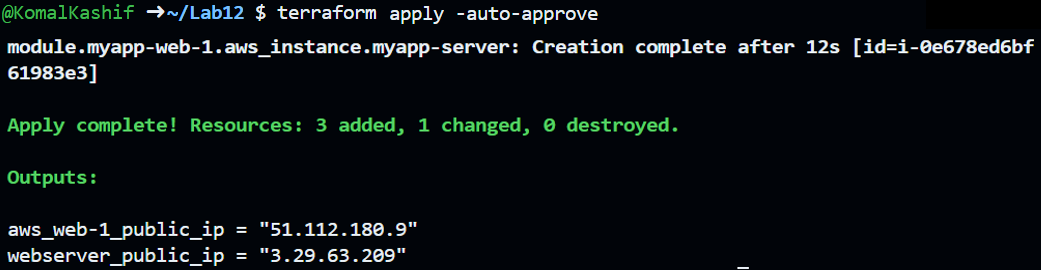
task7\_main\_tf\_web1.png



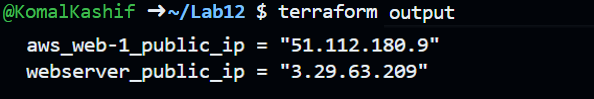
task7\_outputs\_web1.png



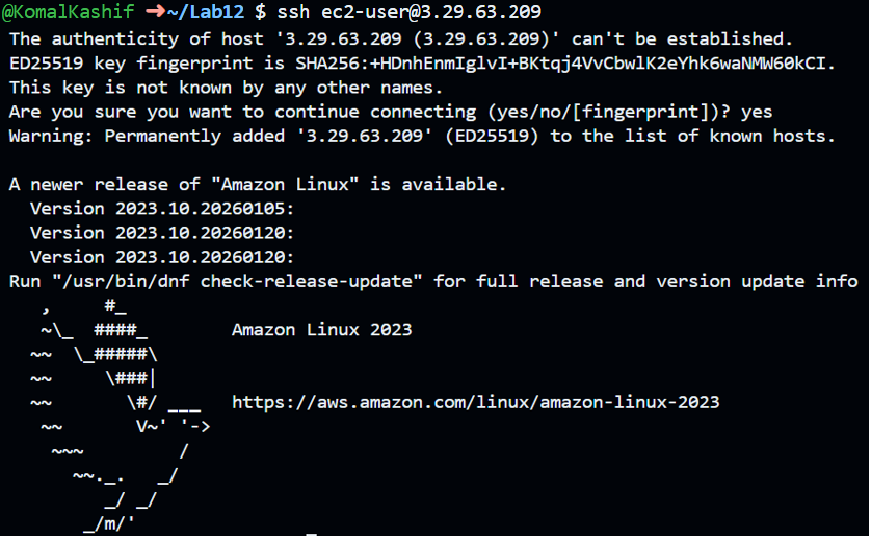
task7\_terraform\_apply.png



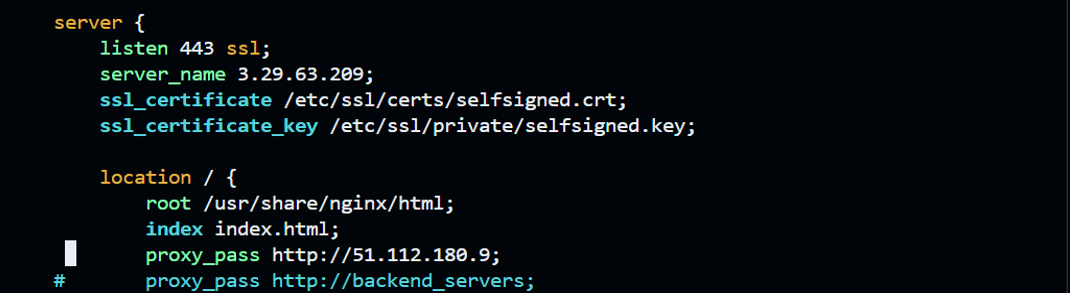
task7\_terraform\_output.png



task7\_ssh\_webserver.png



task7\_nginx\_conf\_reverse\_proxy.png

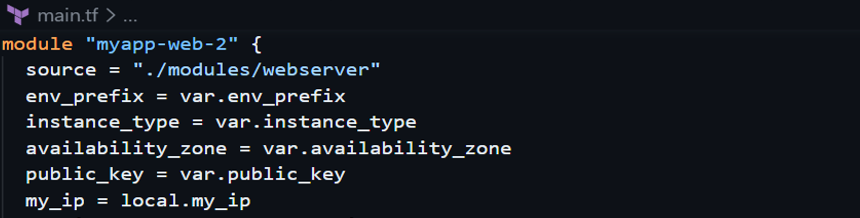


task7\_reverse\_proxy\_browser.png

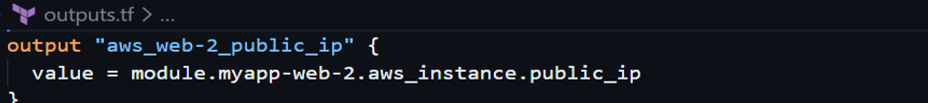


**Task 8 — Configure Nginx as load balancer**

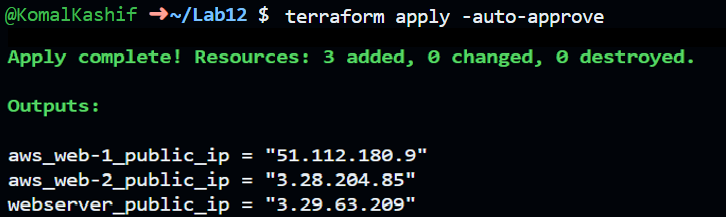
task8\_main\_tf\_web2.png



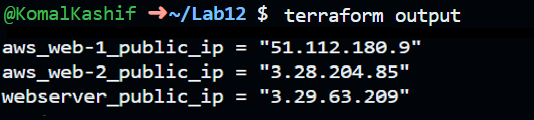
task8\_outputs\_web2.png



task8\_terraform\_apply.png



task8\_terraform\_output.png



task8\_nginx\_conf\_load\_balancer.png

