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ID:2000030236

Prerequisites :

Install Terraform & AWS CLI

Steps :

1) Create an IAM user with appropriate permissions to launch EC2 instances and other resources.

- Configure the AWS CLI with your AWS credentials.

2) Write Terraform code:

- Create a Terraform project directory.
- Create a file named "main.tf" in the project directory.

3) Write Terraform code to launch an EC2 instance with an Apache web server installed.

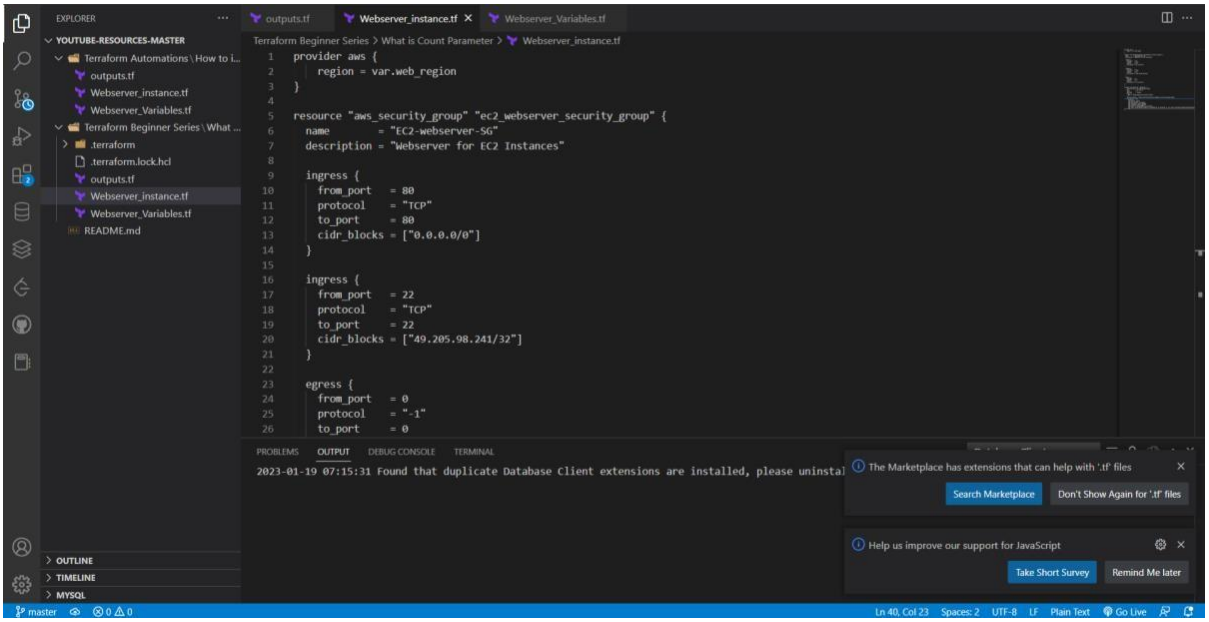
- Initialize Terraform:
- Open a terminal or command prompt.
- Navigate to the Terraform project directory.
- Run the command terraform init to initialize the Terraform working directory.

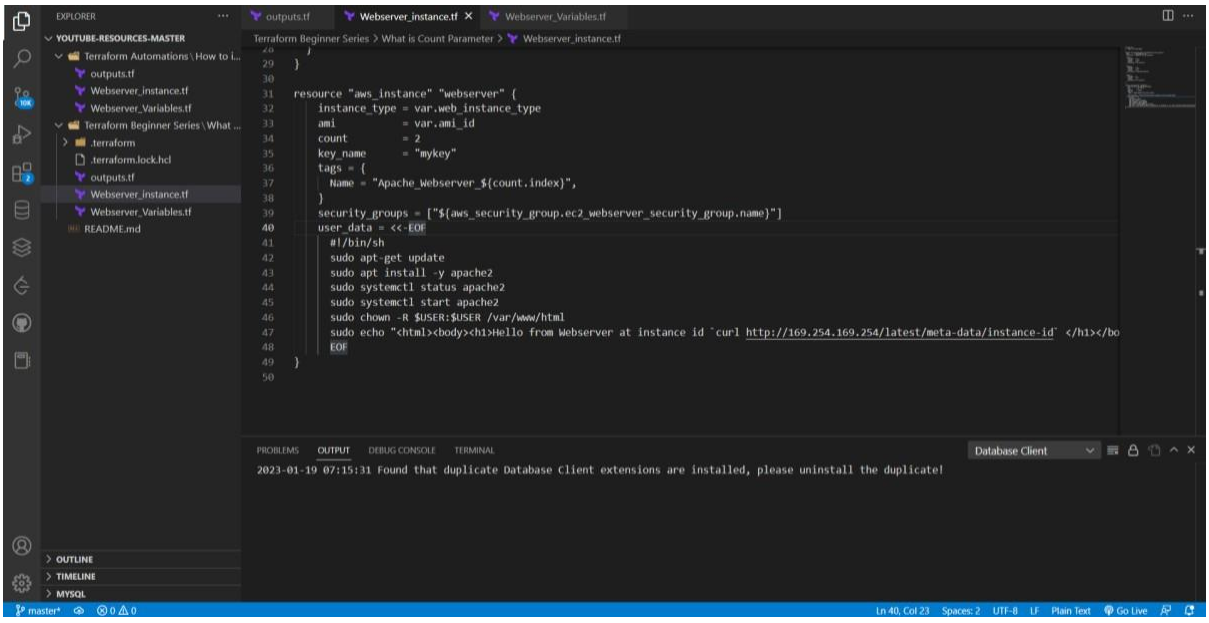
4) Launch the EC2 instance:

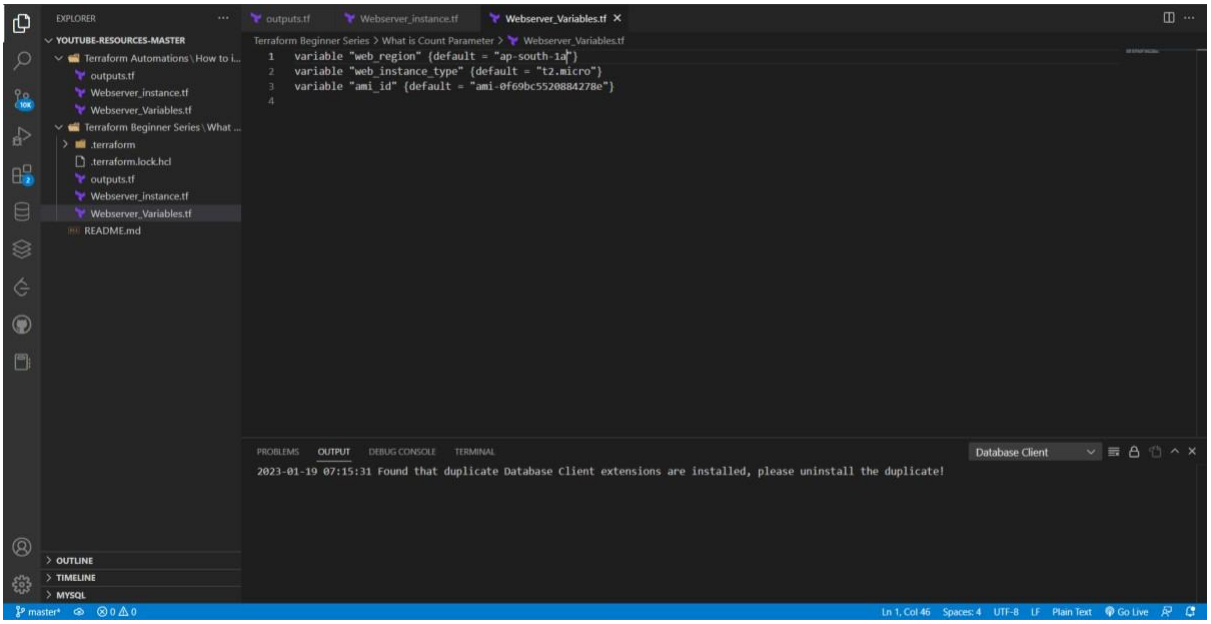
- Run the command terraform apply to launch the EC2 instance.
- Review the changes that will be made, and enter "yes" to confirm.
- Terraform will provision the EC2 instance and install the Apache web server.

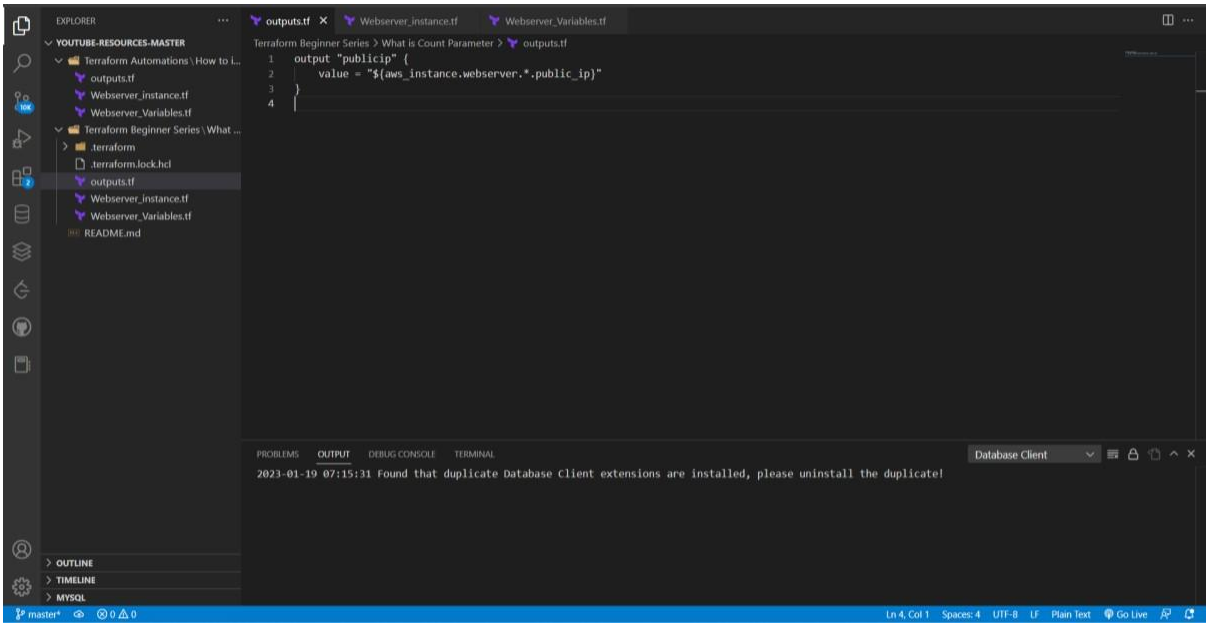
5) Access the Apache web server:

- After the EC2 instance has been launched, retrieve its public IP address using the AWS Console or the AWS CLI.
- Open a web browser and navigate to the IP address. You should see the default Apache web page.






EXPLORER
YOUTUBE-RESOURCES-MASTER
Terraform Automations \ How to i...
outputs.tf
Webserver_instance.tf
Webserver_Variables.tf
Terraform Beginner Series \ What ...
.terraform
.terraform.lock.hcl
outputs.tf
Webserver_instance.tf
Webserver_Variables.tf
README.md
outputs.tf
Webserver_instance.tf
Webserver_Variables.tf
Terraform Beginner Series > What is Count Parameter > Webserver_Variables.tf
1 variable "web_region" {default = "ap-south-1a"}
2 variable "web_instance_type" {default = "t2.micro"}
3 variable "ami_id" {default = "ami-0f69bc5520884278e"}
4
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
Database Client
2023-01-19 07:15:31 Found that duplicate Database Client extensions are installed, please uninstall the duplicate!
OUTLINE
TIMELINE
MYSQL
master*
0 0
Ln 1, Col 46
Spaces: 4
UTF-8
LF
Plain Text
Go Live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Webserver_Variables.tf
Terraform Beginner Series > What is Count Parameter > outputs.tf
1 output "publicip" {
2 value = "${aws_instance.webserver.*.public_ip}"
3 }
4
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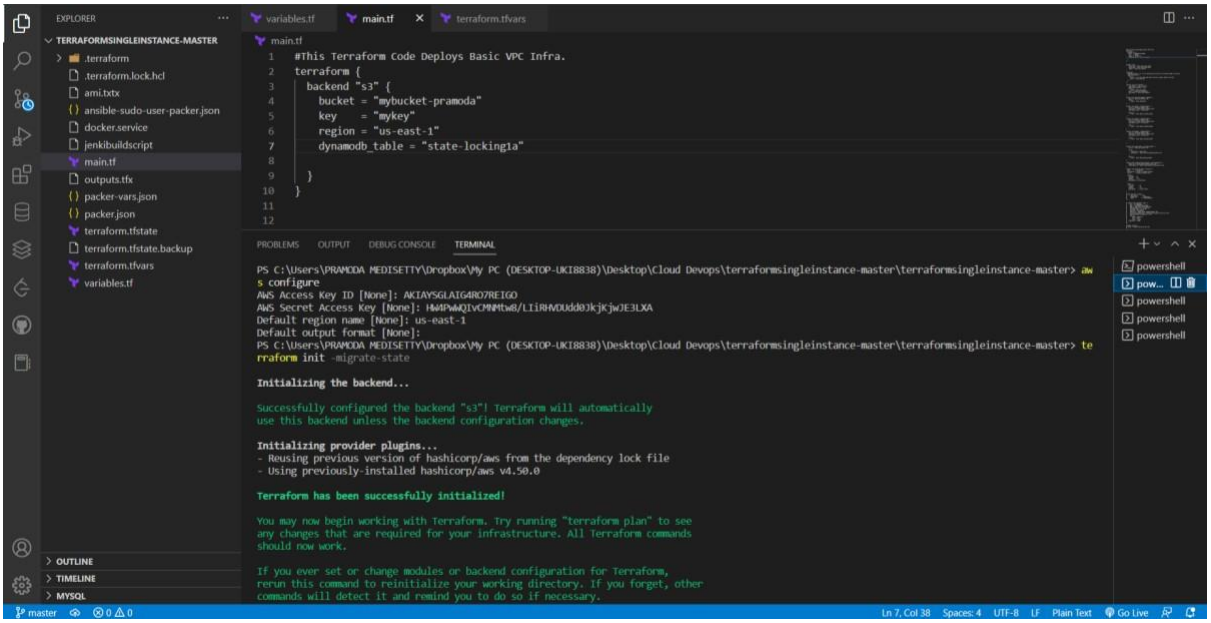
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ansible-sudo-user-packer.json
docker.service
jenkibuildscript
main.tf
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packer-vars.json
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terraform.tfstate.backup
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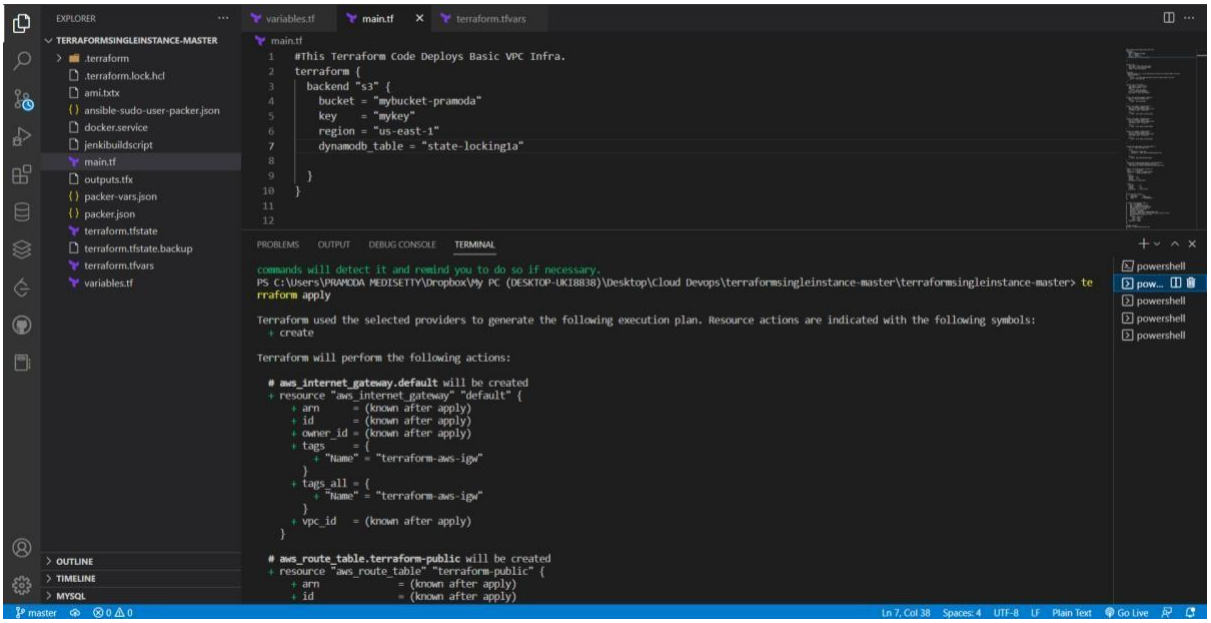
#This Terraform Code Deploys Basic VPC Infra.
terraform {
backend "s3" {
bucket = "mybucket-pramoda"
key = "mykey"
region = "us-east-1"
dynamodb_table = "state-locking1a"
}
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PS C:\Users\PRAMODA MEDISETTY\Dropbox\My PC (DESKTOP-UKI8838)\Desktop\Cloud Devops\terraformsingleinstance-master\terraformsingleinstance-master> aw
s configure
AWS Access Key ID [None]: AKIAYSGLAIG4RO7REIGO
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]:
PS C:\Users\PRAMODA MEDISETTY\Dropbox\My PC (DESKTOP-UKI8838)\Desktop\Cloud Devops\terraformsingleinstance-master\terraformsingleinstance-master> te
rraform init -migrate-state
Initializing the backend...
Successfully configured the backend "s3"! Terraform will automatically
use this backend unless the backend configuration changes.
Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v4.50.0
Terraform has been successfully initialized!
You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.
If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
powershell
pow...
powershell
powershell
powershell
master
Ln 7, Col 38
Spaces: 4
UTF-8
LF
Plain Text
Go Live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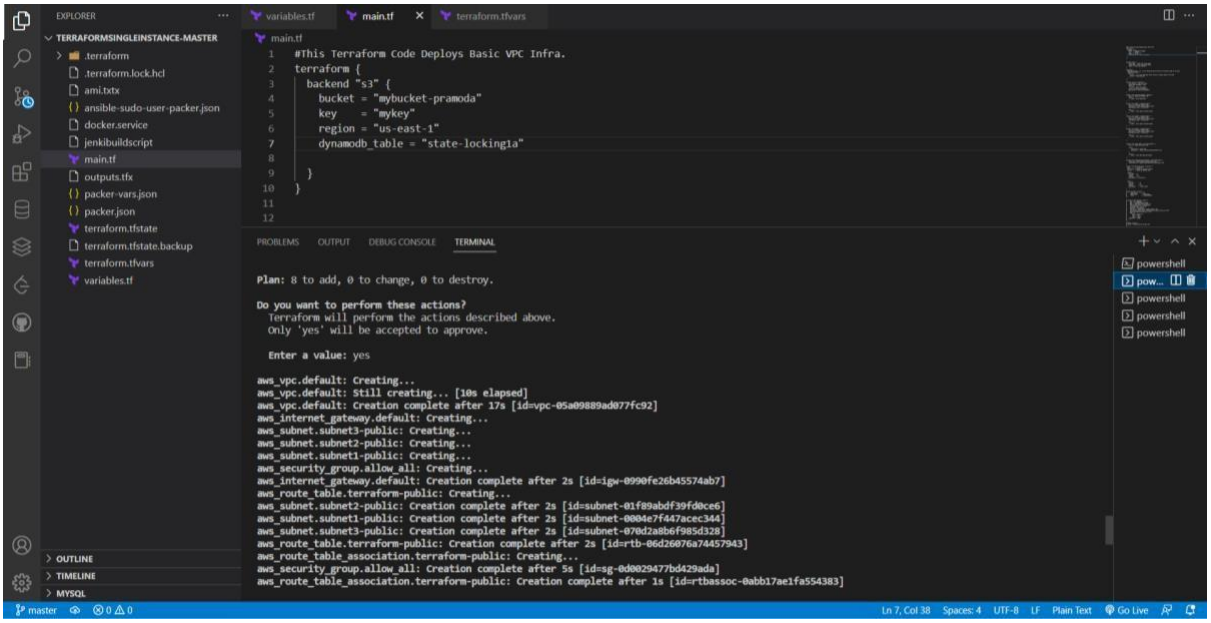
PS C:\Users\PRAMODA MEDISETTY\Dropbox\My PC (DESKTOP-UKI8838)\Desktop\Cloud Devops\terraformsingleinstance-master\terraformsingleinstance-master> te
rraform apply
Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
Terraform will perform the following actions:
# aws_internet_gateway.default will be created
+ resource "aws_internet_gateway" "default" {
+ arn = (known after apply)
+ id = (known after apply)
+ owner_id = (known after apply)
+ tags = {
+ "Name" = "terraform-aws-igw"
}
+ tags_all = {
+ "Name" = "terraform-aws-igw"
}
+ vpc_id = (known after apply)
}
# aws_route_table.terraform-public will be created
+ resource "aws_route_table" "terraform-public" {
+ arn = (known after apply)
+ id = (known after apply)
powershell
pow...
powershell
powershell
powershell
master
Ln 7, Col 38
Spaces: 4
UTF-8
LF
Plain Text
Go Live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Plan: 8 to add, 0 to change, 0 to destroy.
Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.
Enter a value: yes
aws_vpc.default: Creating...
aws_vpc.default: Still creating... [10s elapsed]
aws_vpc.default: Creation complete after 17s [id=vpc-05a09889ad077fc92]
aws_internet_gateway.default: Creating...
aws_subnet.subnet3-public: Creating...
aws_subnet.subnet2-public: Creating...
aws_subnet.subnet1-public: Creating...
aws_security_group.allow_all: Creating...
aws_internet_gateway.default: Creation complete after 2s [id=igw-0990fe26b45574ab7]
aws_route_table.terraform-public: Creating...
aws_subnet.subnet2-public: Creation complete after 2s [id=subnet-01f89abdf39fd0ce6]
aws_subnet.subnet1-public: Creation complete after 2s [id=subnet-0004e7f447acec344]
aws_subnet.subnet3-public: Creation complete after 2s [id=subnet-070d2a8b6f985d328]
aws_route_table.terraform-public: Creation complete after 2s [id=rtb-06d26076a74457943]
aws_route_table_association.terraform-public: Creating...
aws_security_group.allow_all: Creation complete after 5s [id=sg-0d0029477bd429ada]
aws_route_table_association.terraform-public: Creation complete after 1s [id=rtbassoc-0abb17ae1fa554383]
powershell
pow...
powershell
powershell
powershell
master
0 0
Ln 7, Col 38
Spaces: 4
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