

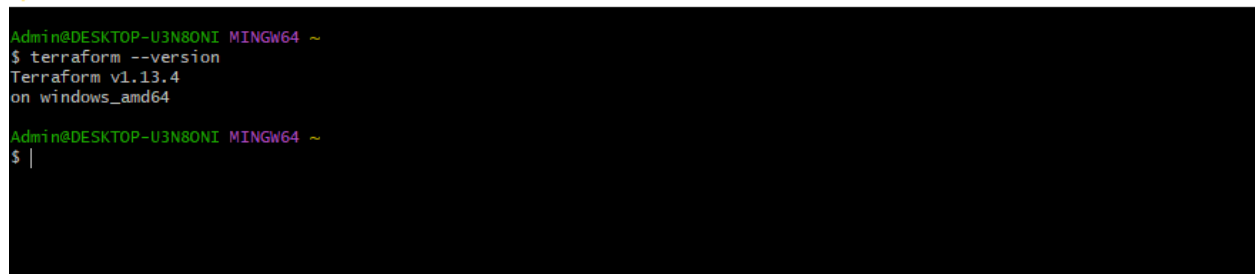
Week 6 Class 7 AWS Homework Text Document reviewed by Larry Harris who was able to successfully initiate Terraform with this.

Disclaimer: This document assumes you have Terraform installed. If you do not please open Powershell as an administrator and run the following command : choco list. Once you have successfully installed Terraform please start at step 1.

### 1. Log into GitBash as an administrator .



### 2. Verify you have the latest version of terraform on your machine with the terraform – version command .



3. Theo/Aaron has provided us a curl command that sets up the proper file structure for Terraform by running the following command. Just run the following command in any folder as it will setup the structure for you : “curl <https://raw.githubusercontent.com/aaron-dm-mcdonald/Class7-notes/refs/heads/main/101825/check.sh> | bash” and it will display a file structure as seen below.

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform
```

4. Run the command “ls -a” to display all files even the hidden ones in this directory. The file you’re looking for is a .gitignore file in the directory that you will be working out of for this Terraform exercise.

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform
$ ls -a
./ ../ .gitignore 101825/ 101925/ 102525/ 102725/ class5/ week6/
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform
$
```

5. Make a new directory that you’re going to be working out of and the command to do it is “mkdir”.

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform
$ mkdir week6stepbystep
```

6. Next, change into the directory you just made by running the “cd” command .

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform
$ cd week6stepbystep
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$
```

7. Copy the .gitignore file to the directory you just made like this “cp ../.gitignore week6stepbystep.”

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform
$ cp ../.gitignore week6stepbystep/
```

8

8. Verify if it copied to the directory by running ls-a .

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$ ls -a
./ ../ .gitignore week6stepbystep
```

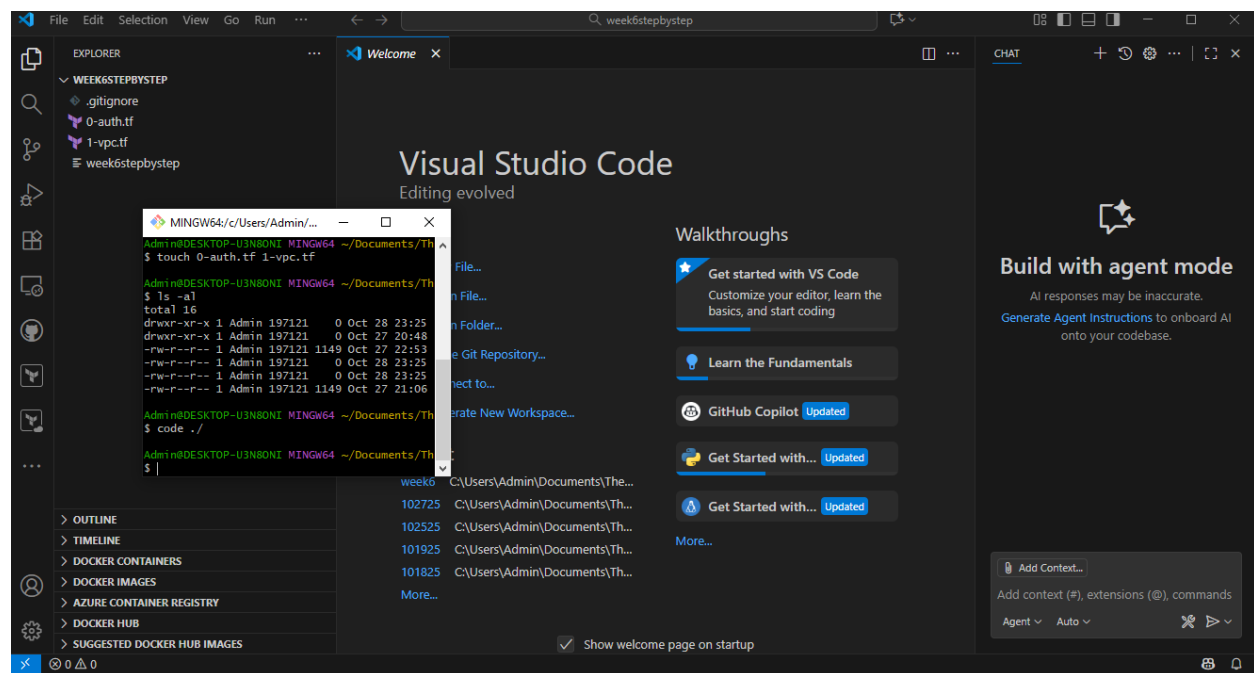
9. Create the auth.tf and 1-vpc.tf files.

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$ touch 0-auth.tf 1-vpc.tf
```

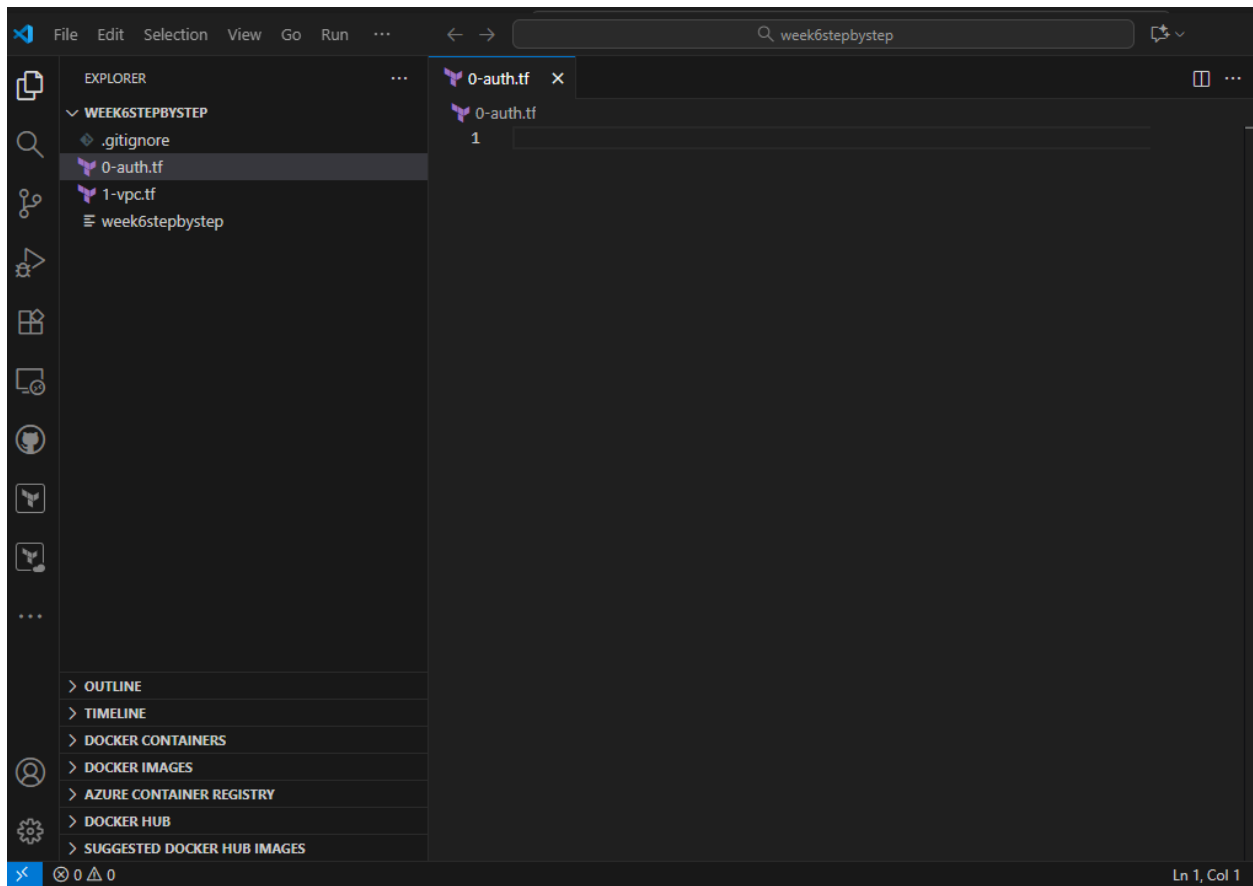
10. Verify the files auth.tf and vpc.tf were copied to the week6stepbystep directory.

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$ ls -al
total 16
drwxr-xr-x 1 Admin 197121  0 Oct 28 23:25 ./
drwxr-xr-x 1 Admin 197121  0 Oct 27 20:48 ../
-rw-r--r-- 1 Admin 197121 1149 Oct 27 22:53 .gitignore
-rw-r--r-- 1 Admin 197121  0 Oct 28 23:25 0-auth.tf
-rw-r--r-- 1 Admin 197121  0 Oct 28 23:25 1-vpc.tf
-rw-r--r-- 1 Admin 197121 1149 Oct 27 21:06 week6stepbystep
```

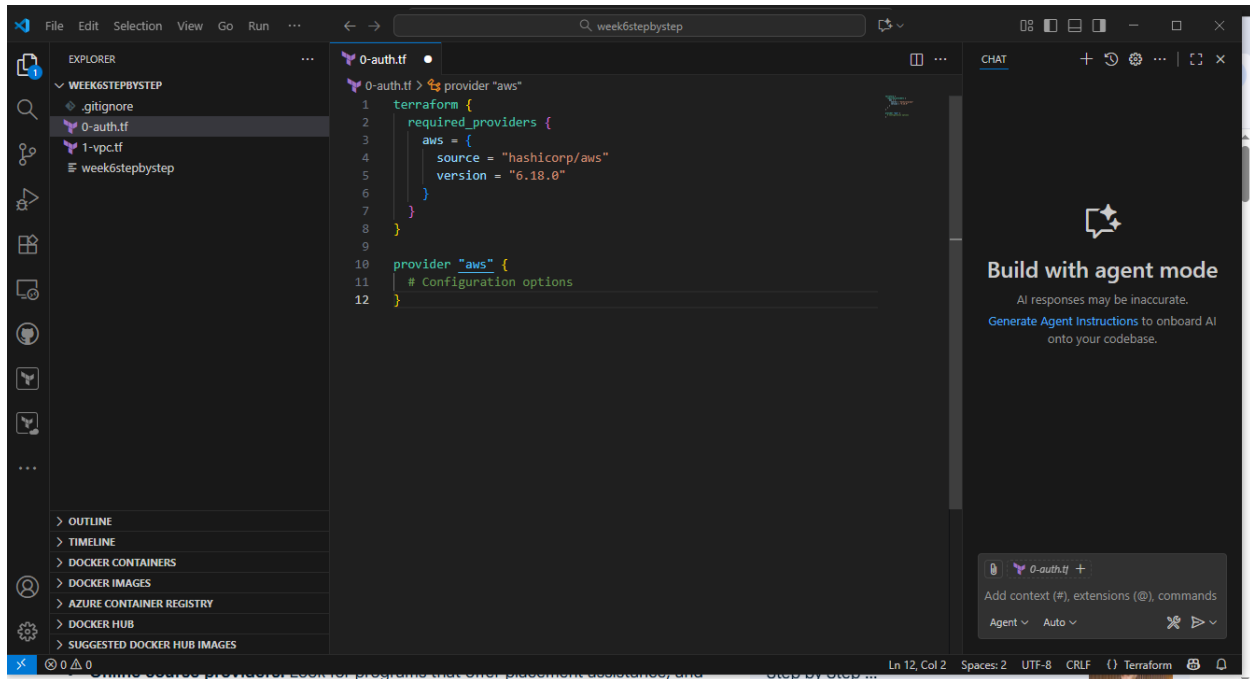
11. Open VS code in the present directory with the “code .” and close Gitbash as it’s not needed any more.



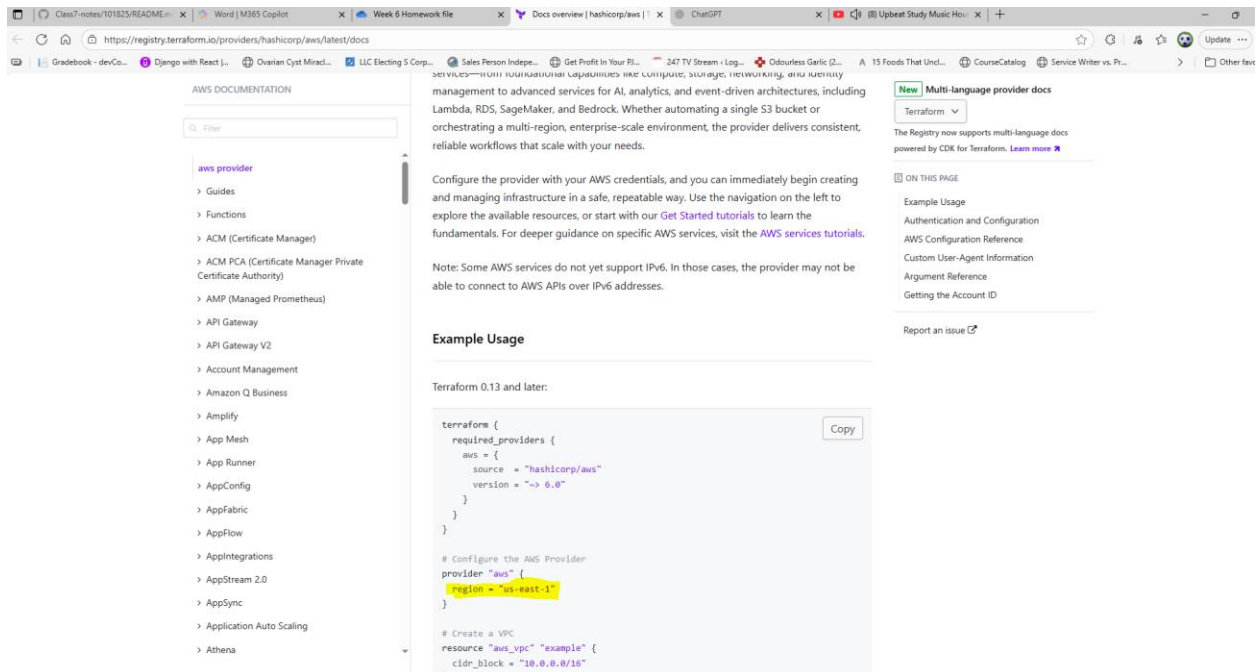
12. Open the 0-auth.tf file.



13. Authenticate the 0-auth.tf file by copying the code from <https://registry.terraform.io/browse/providers-select> AWS-click on “provider” on the right side in purple/white - drop down arrow-copy all of the code there and paste it on line 1 of the 0-auth.tf file.



14. Add the argument “region” to the provider section and enter the region your vpc will be placed in. For instance a very common one here in the us is Northern Virginia and that region is us-east-1 and I suggest using this one. Please go to this site [Docs overview | hashicorp/aws | Terraform | Terraform Registry](#). Scroll down until you see the “Example Usage” section and copy “region = us-east1” and paste it in the provider AWS section of the 0-auth.tf file in Visual Studio code. Please see illustrations below.



```
9
10 provider "aws" {
11     # Configuration options
12     region = "us-east-1"
13 }
```

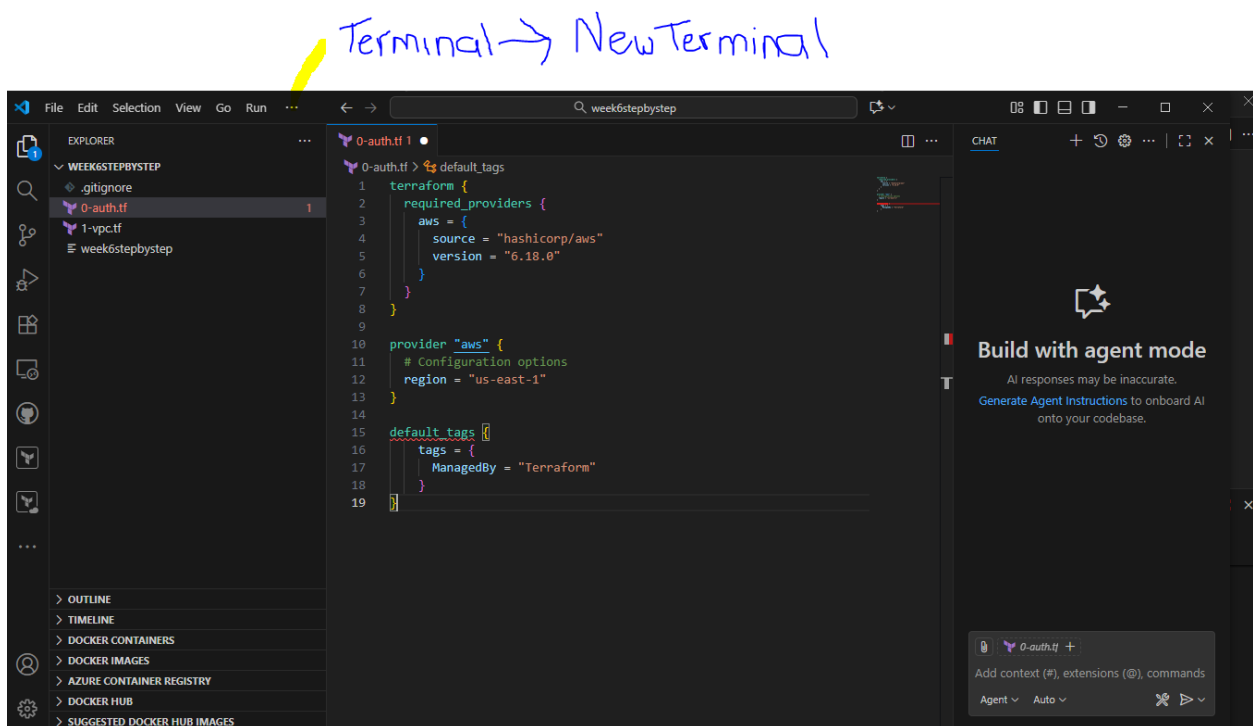
15. Next, we need to add the “default tags” argument on the 0-auth document. Go to [Docs overview | hashicorp/aws | Terraform | Terraform Registry](#) and scroll down and find “default\_tags” and copy it or you could just type it out and place it under the provider section. Then, add the tags ManagedBy = “Terraform”

```

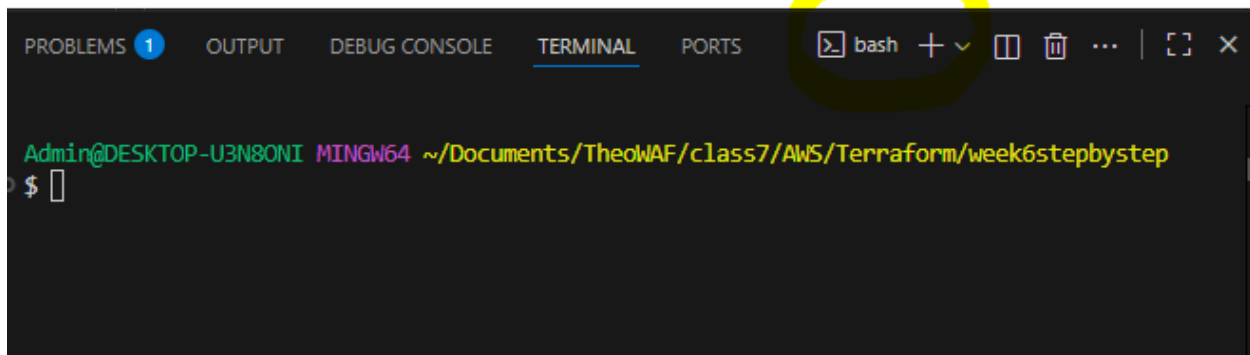
10 provider "aws" {
11     # Configuration options
12     region = "us-east-1"
13
14
15     default_tags {
16         tags = {
17             ManagedBy = "Terraform"
18         }
19     }
20 }
21 }
22

```

16. Enable the terminal in Visual Studio Code.

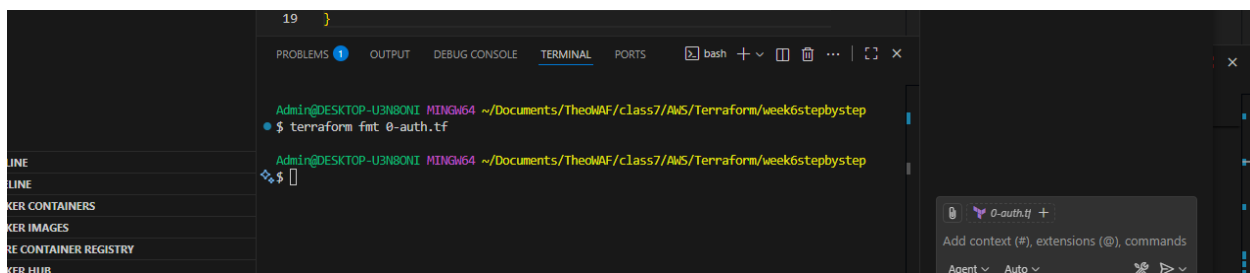


17. In the terminal make sure “bash” is selected.



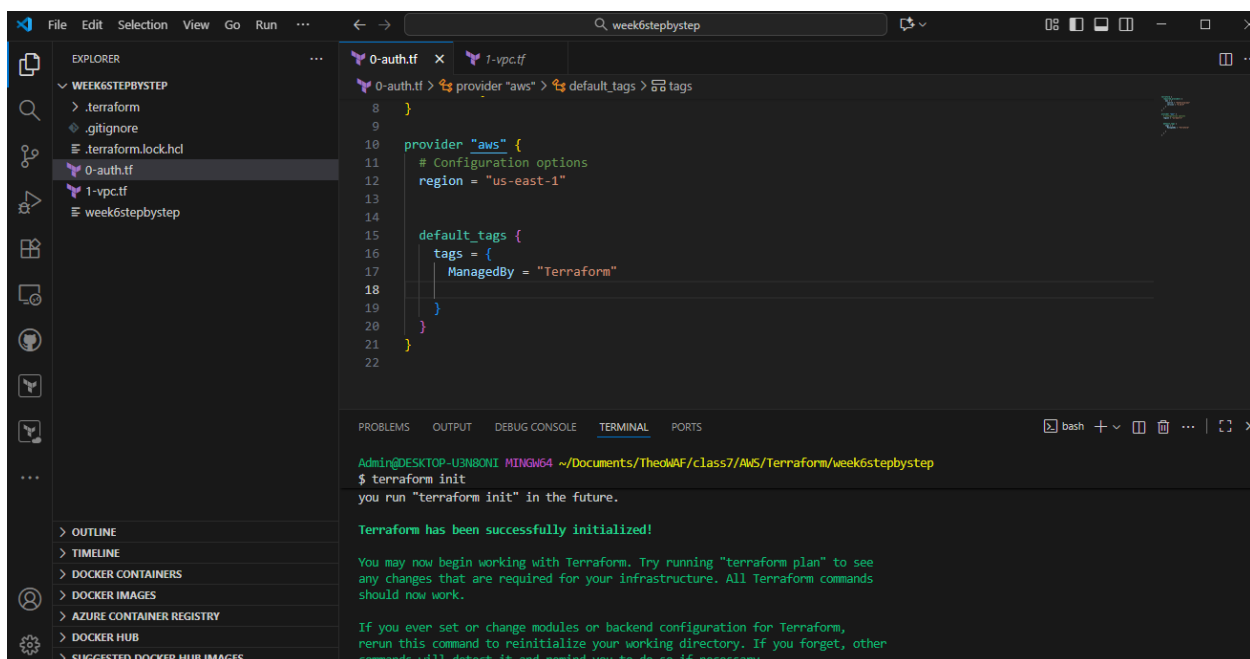
```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$
```

18. In the terminal run the command “terraform fmt 0-auth.tf” and press Enter



```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$ terraform fmt 0-auth.tf
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$
```

19. Verify if the authentication file will work by running “terraform init.”



```
0-auth.tf
provider "aws" {
  # Configuration options
  region = "us-east-1"

  default_tags {
    tags = {
      ManagedBy = "Terraform"
    }
  }
}
```

```
Admin@DESKTOP-U3N8ONI MINGW64 ~/Documents/TheoWAF/class7/AWS/Terraform/week6stepbystep
$ terraform init
you run "terraform init" in the future.

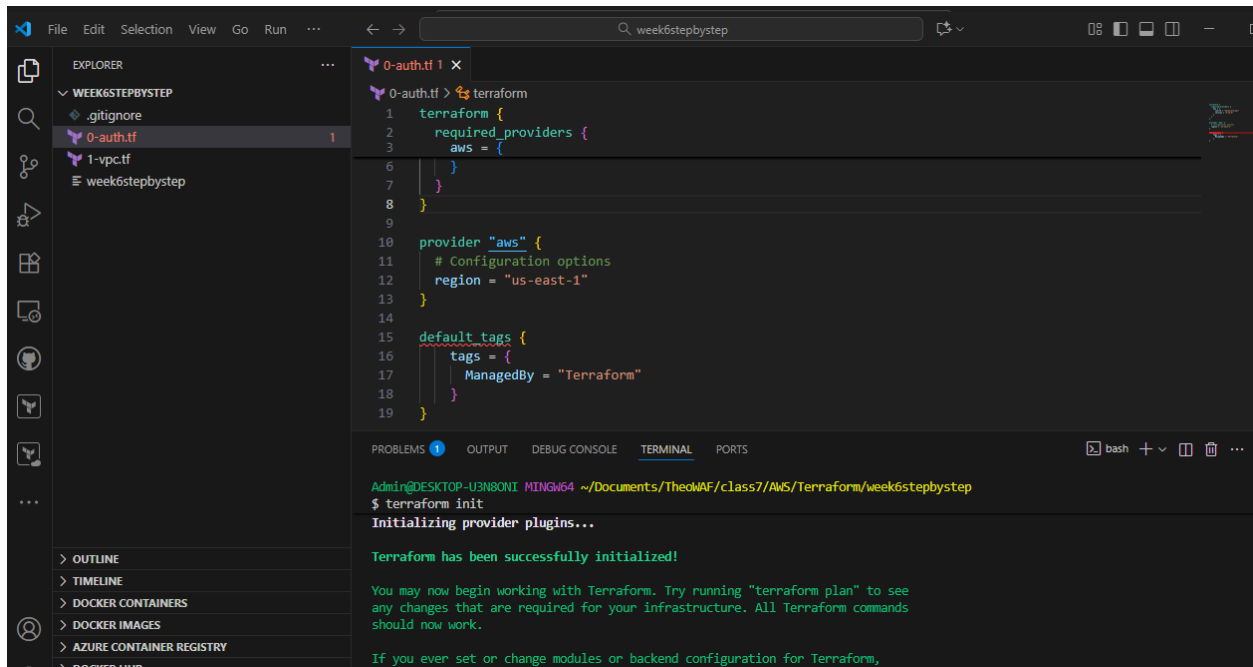
Terraform has been successfully initialized!

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.

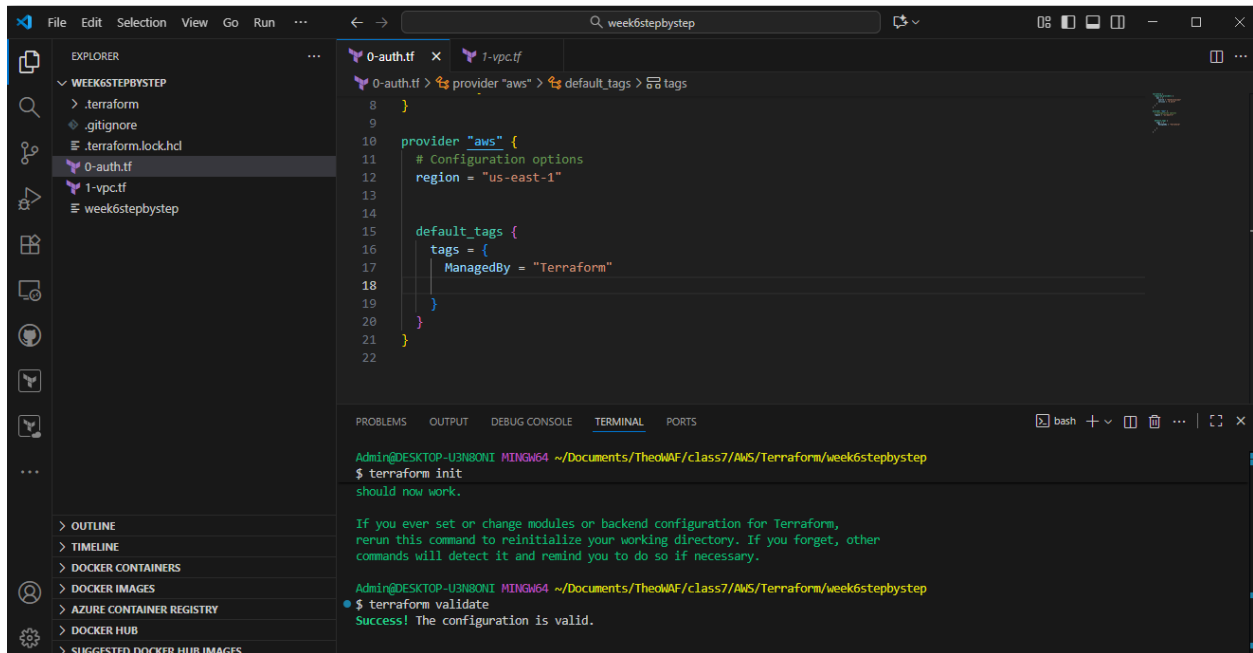
If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```



20. Save the 0-auth.tf file – Ctrl + S and notice the white dot is no longer on the tab.



21. Validate the terraform program by running “terraform validate.”



## 22. Run the “aws sts get-caller-identity” command

