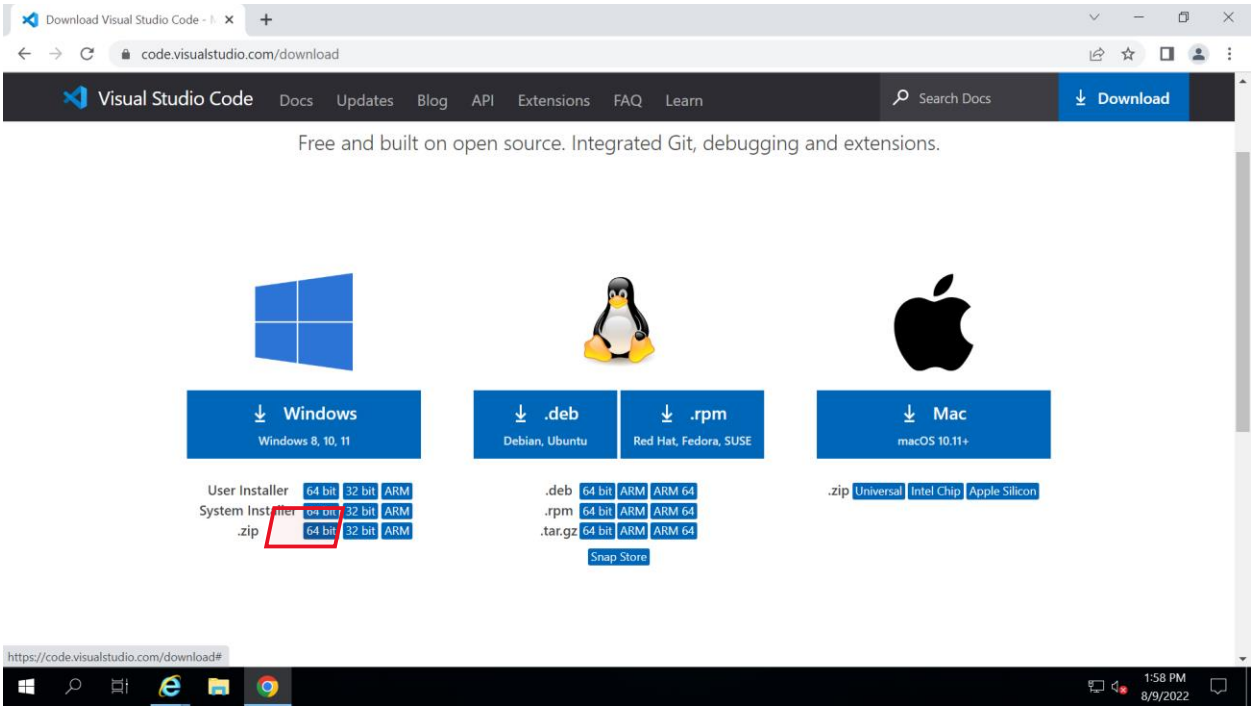
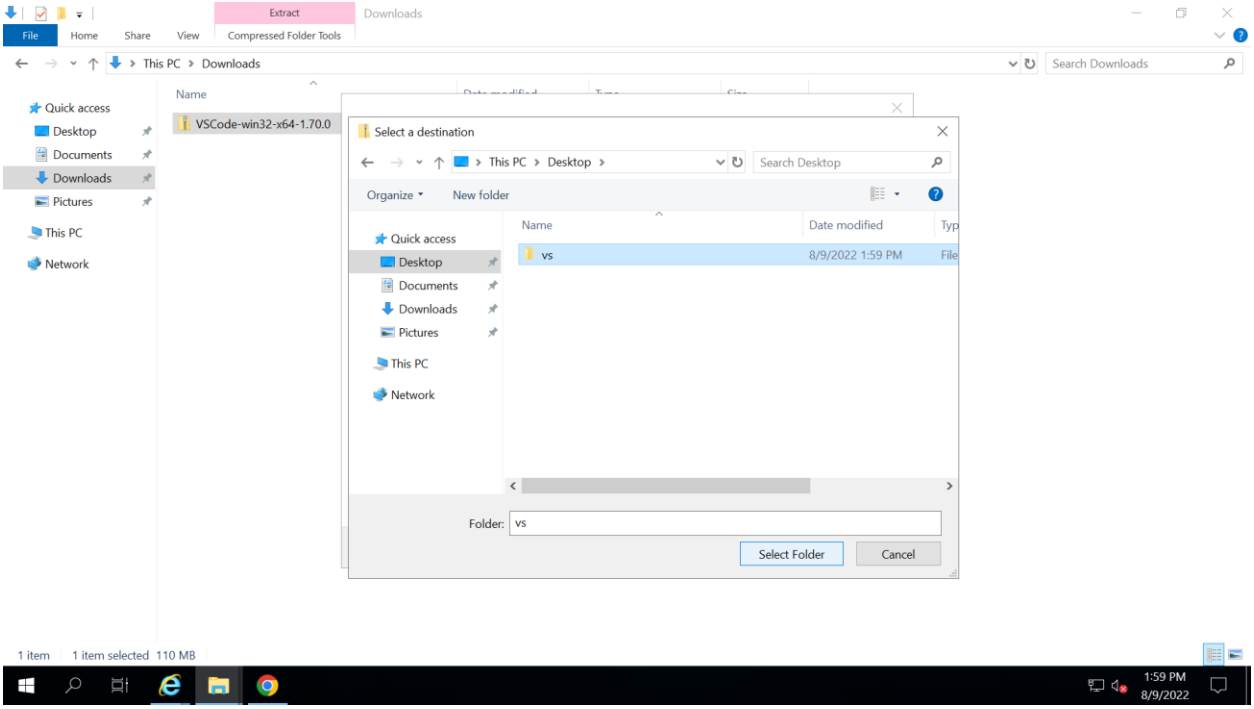
Launch EC2 via terraform :-

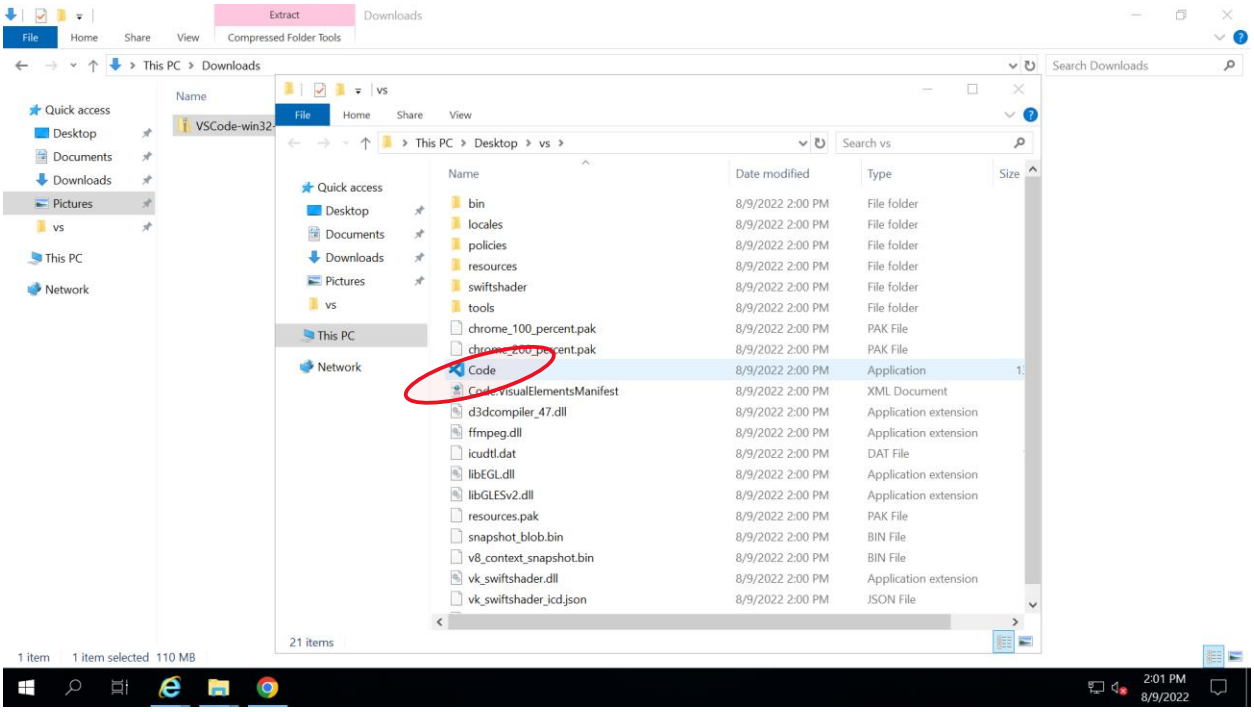
Launch windows ec2 machine and download Visual Studio code zip file



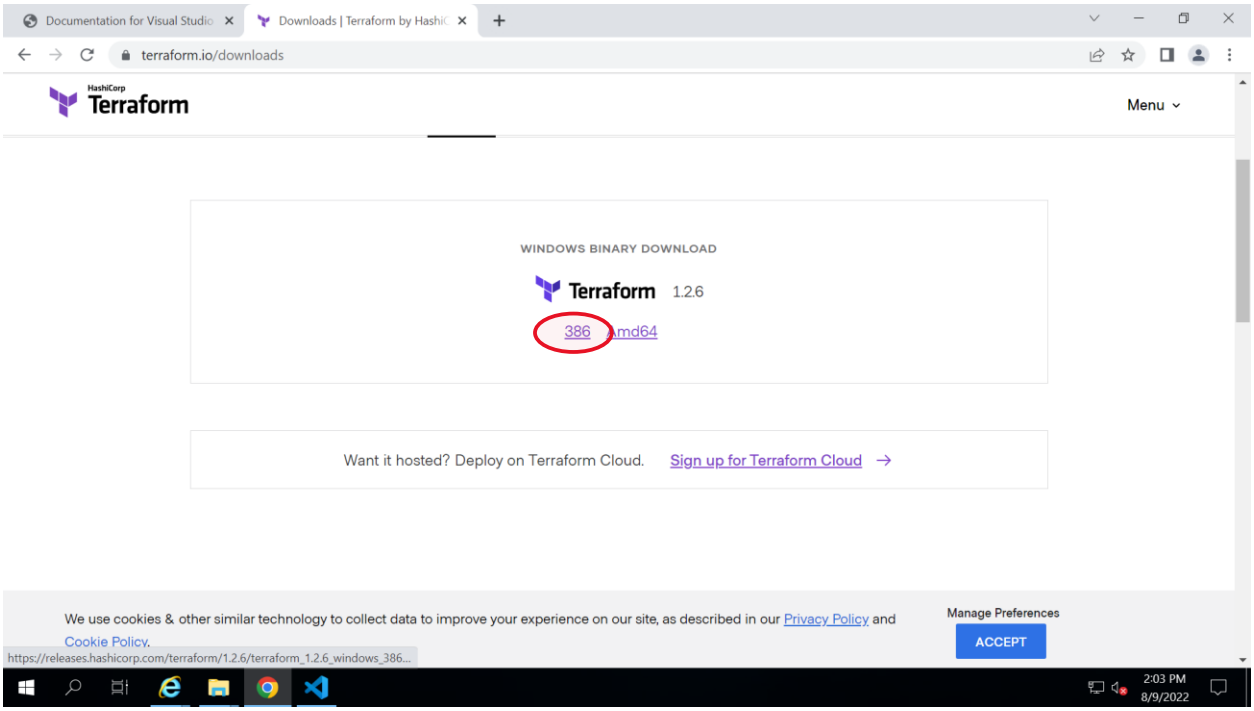
Create a new folder and extract the downloaded zip file to that folder.



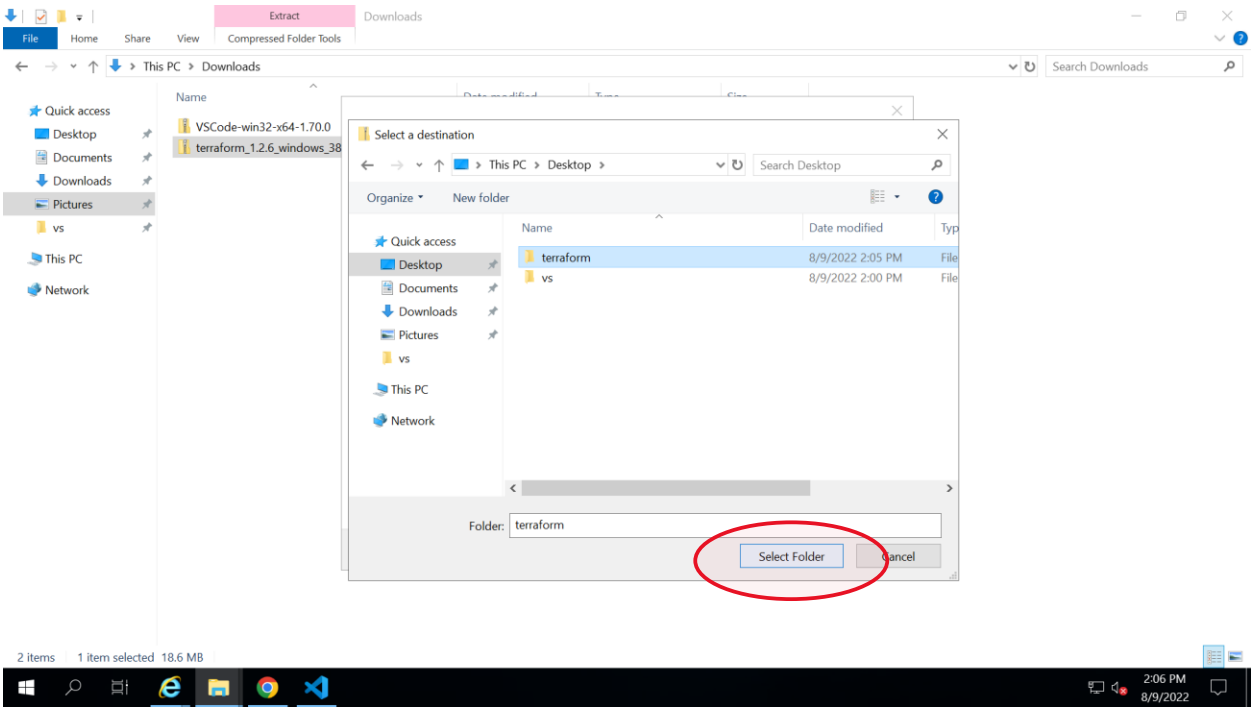
Open Code from the extracted files.



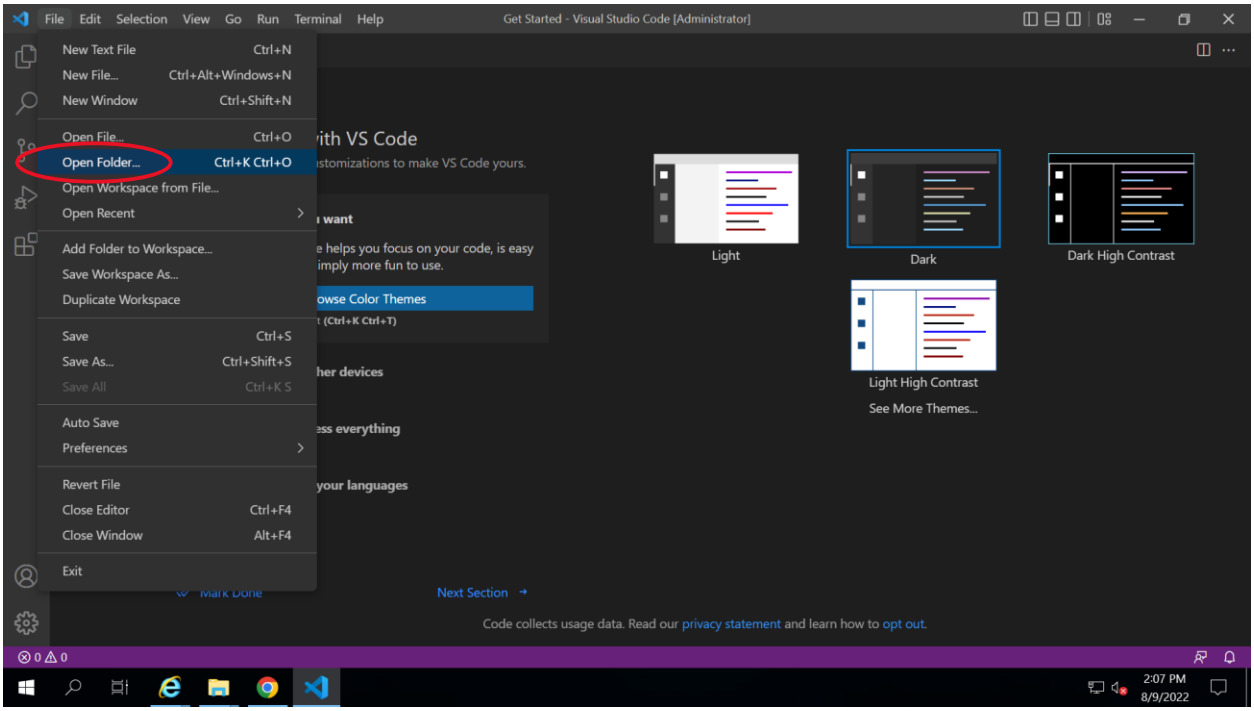
Click on 386 and download terraform

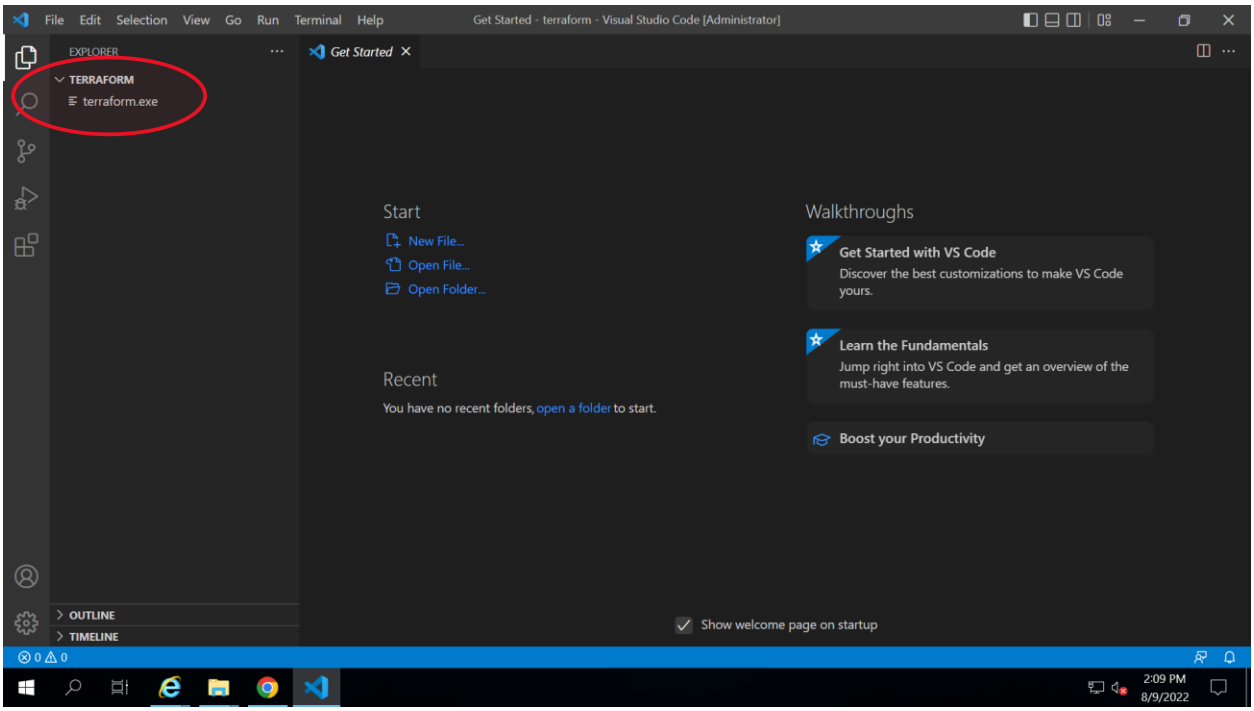


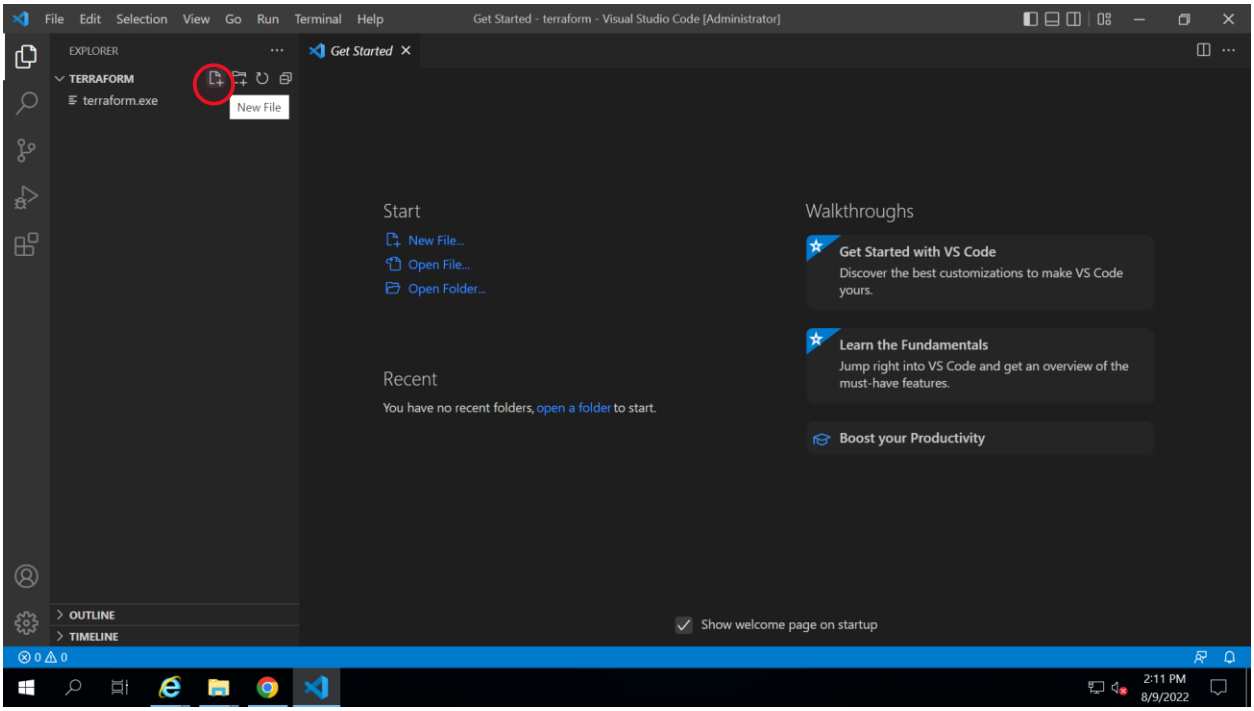
Create new folder and extract the downloaded terraform to that folder



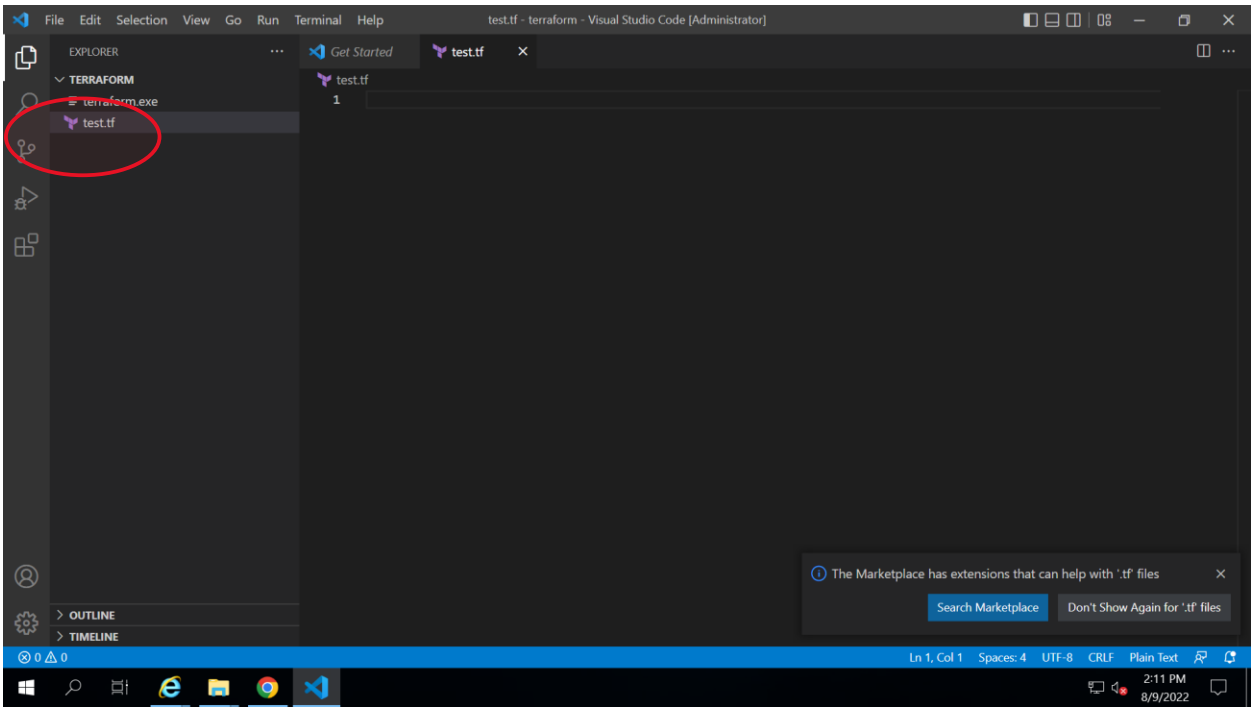
Open terraform folder in VS code

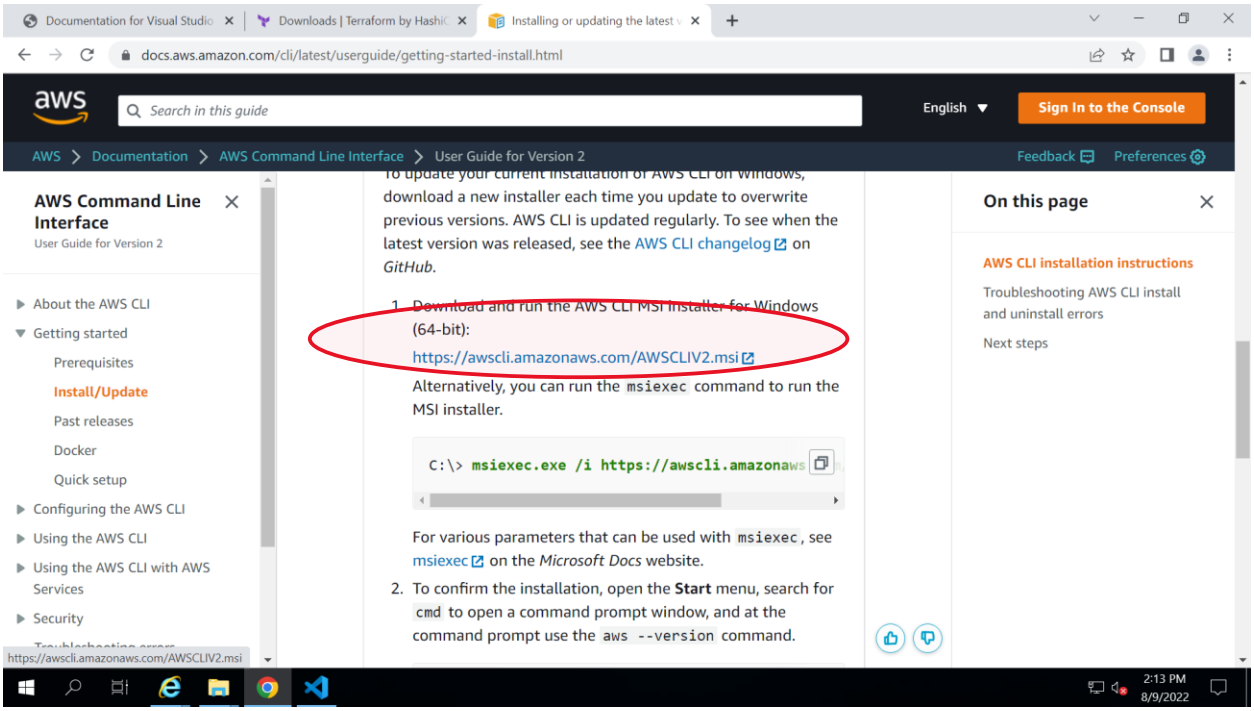






Create a file with the extension of .tf


File Edit Selection View Go Run Terminal Help
test.tf - terraform - Visual Studio Code [Administrator]
EXPLORER
TERRAFORM
terraform.exe
test.tf
Get Started
test.tf
1
The Marketplace has extensions that can help with '.tf' files
Search Marketplace
Don't Show Again for '.tf' files
OUTLINE
TIMELINE
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Plain Text
2:11 PM
8/9/2022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User Guide for Version 2
About the AWS CLI
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Prerequisites
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Past releases
Docker
Quick setup
Configuring the AWS CLI
Using the AWS CLI
Using the AWS CLI with AWS Services
Security
download a new installer each time you update to overwrite previous versions. AWS CLI is updated regularly. To see when the latest version was released, see the AWS CLI changelog on GitHub.
1. Download and run the AWS CLI MSI installer for Windows (64-bit):
https://awscli.amazonaws.com/AWSCLIV2.msi
Alternatively, you can run the msiexec command to run the MSI installer.
C:\> msiexec.exe /i https://awscli.amazonaws
For various parameters that can be used with msiexec, see msiexec on the Microsoft Docs website.
2. To confirm the installation, open the Start menu, search for cmd to open a command prompt window, and at the command prompt use the aws --version command.
On this page
AWS CLI installation instructions
Troubleshooting AWS CLI install and uninstall errors
Next steps
https://awscli.amazonaws.com/AWSCLIV2.msi
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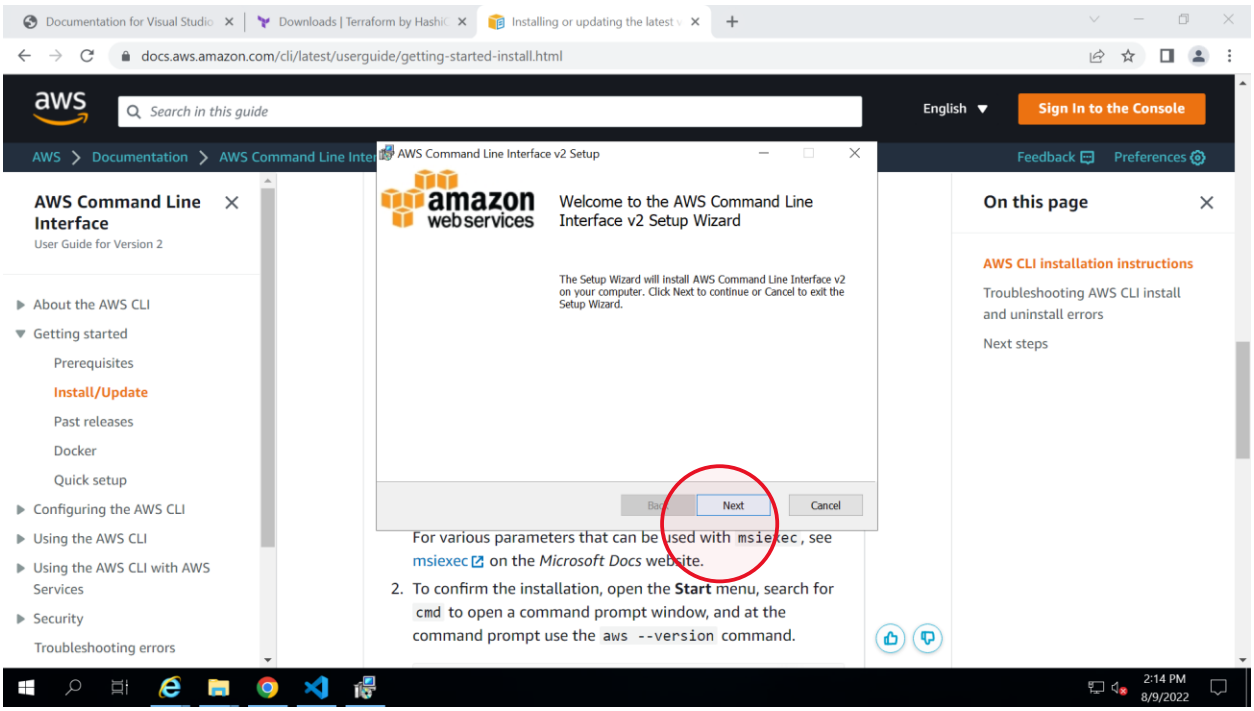
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Configuring the AWS CLI
Using the AWS CLI
Using the AWS CLI with AWS Services
Security
Troubleshooting errors
AWS Command Line Interface v2 Setup
amazon web services
Welcome to the AWS Command Line Interface v2 Setup Wizard
The Setup Wizard will install AWS Command Line Interface v2 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
Back
Next
Cancel
For various parameters that can be used with msiexec, see msiexec on the Microsoft Docs website.
2. To confirm the installation, open the Start menu, search for cmd to open a command prompt window, and at the command prompt use the aws --version command.
On this page
AWS CLI installation instructions
Troubleshooting AWS CLI install and uninstall errors
Next steps
2:14 PM
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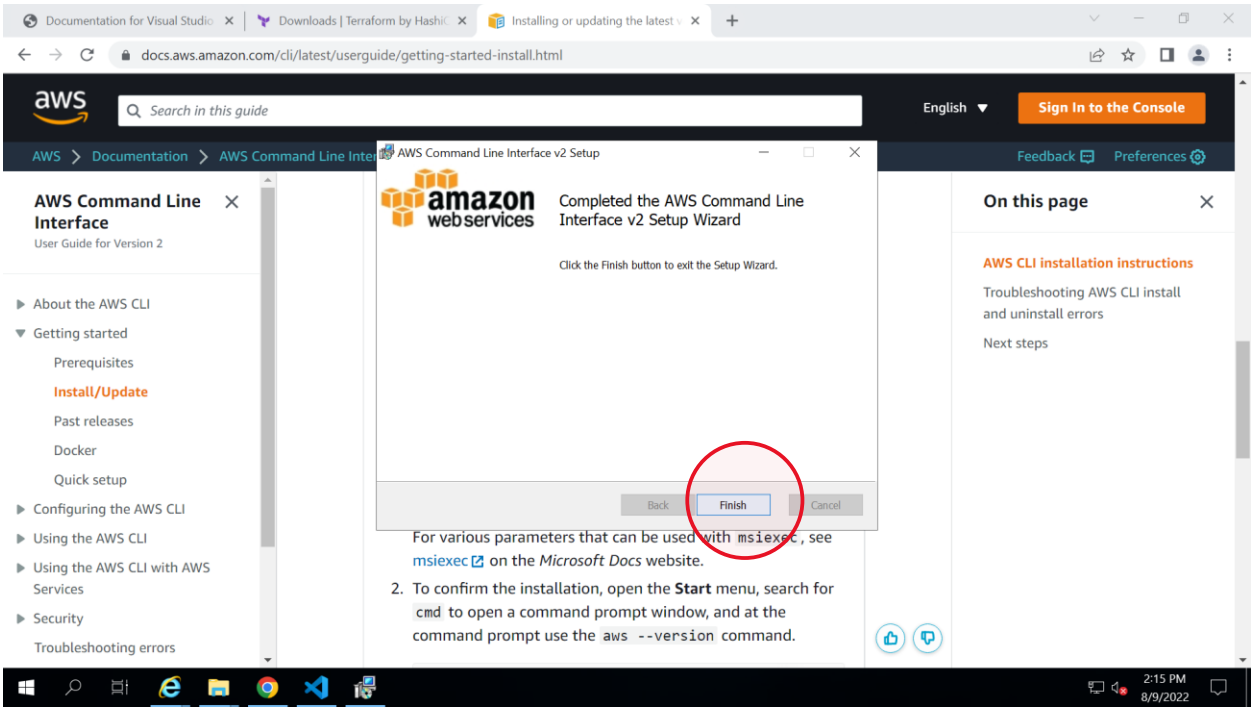
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Quick setup
Configuring the AWS CLI
Using the AWS CLI
Using the AWS CLI with AWS Services
Security
Troubleshooting errors
AWS Command Line Interface v2 Setup
amazon web services
Completed the AWS Command Line Interface v2 Setup Wizard
Click the Finish button to exit the Setup Wizard.
Back
Finish
Cancel
For various parameters that can be used with msiexec, see msiexec on the Microsoft Docs website.
2. To confirm the installation, open the Start menu, search for cmd to open a command prompt window, and at the command prompt use the aws --version command.
On this page
AWS CLI installation instructions
Troubleshooting AWS CLI install and uninstall errors
Next steps
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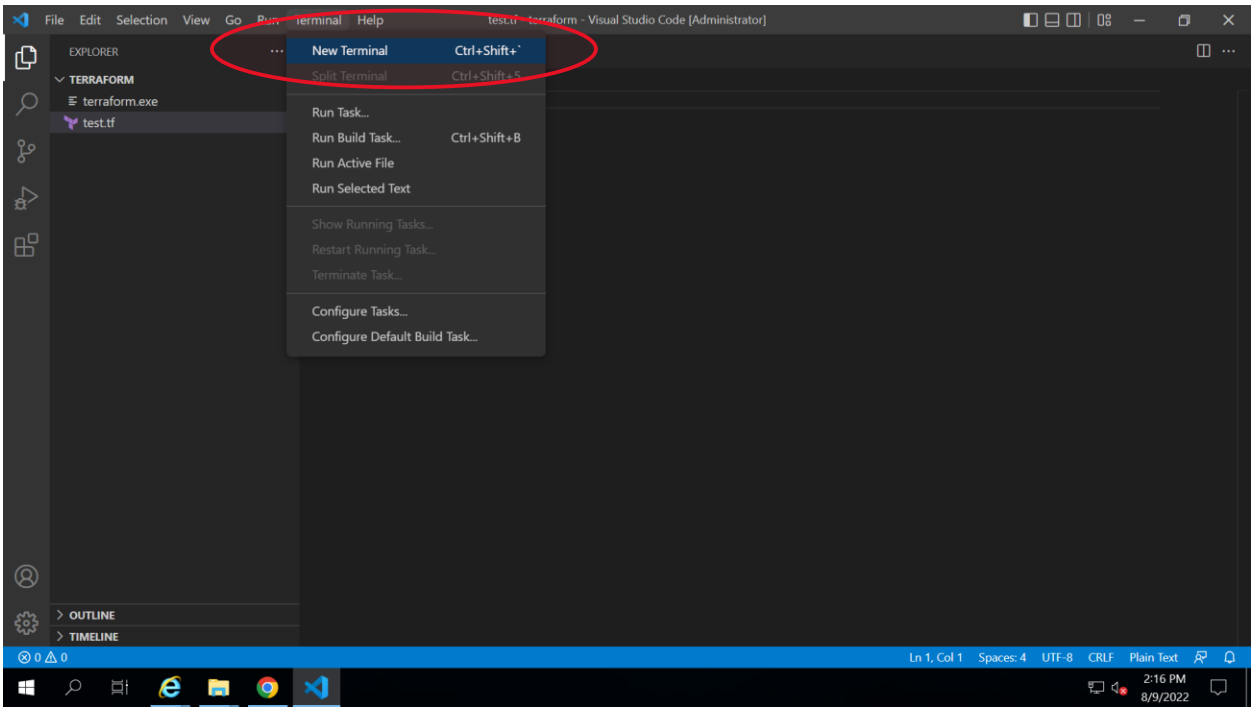
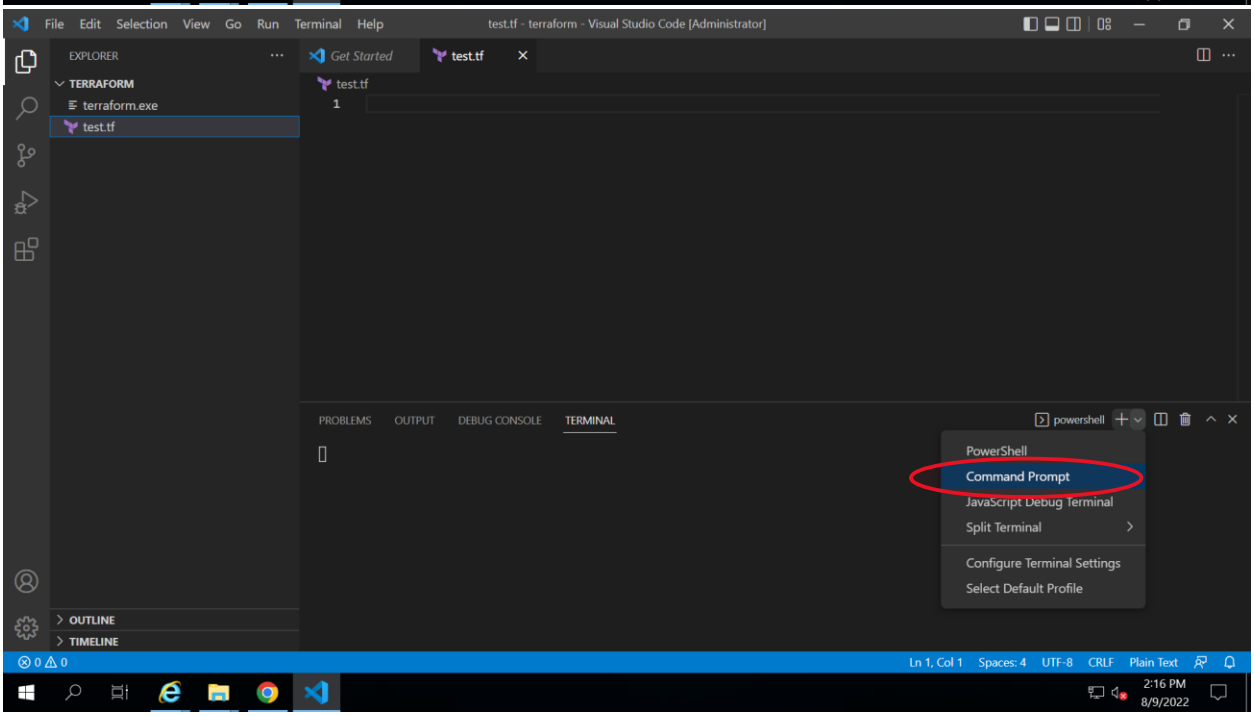

File Edit Selection View Go Run Terminal Help
test.tf - terraform - Visual Studio Code [Administrator]
EXPLORER
TERRAFORM
terraform.exe
test.tf
New Terminal Ctrl+Shift+`
Split Terminal Ctrl+Shift+5
Run Task...
Run Build Task... Ctrl+Shift+B
Run Active File
Run Selected Text
Show Running Tasks...
Restart Running Task...
Terminate Task...
Configure Tasks...
Configure Default Build Task...
OUTLINE
TIMELINE
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Plain Text
2:16 PM
8/9/2022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test.tf - terraform - Visual Studio Code [Administrator]
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TERRAFORM
terraform.exe
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Get Started
test.tf
1
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
powershell
PowerShell
Command Prompt
JavaScript Debug Terminal
Split Terminal
Configure Terminal Settings
Select Default Profile
OUTLINE
TIMELINE
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Plain Text
2:16 PM
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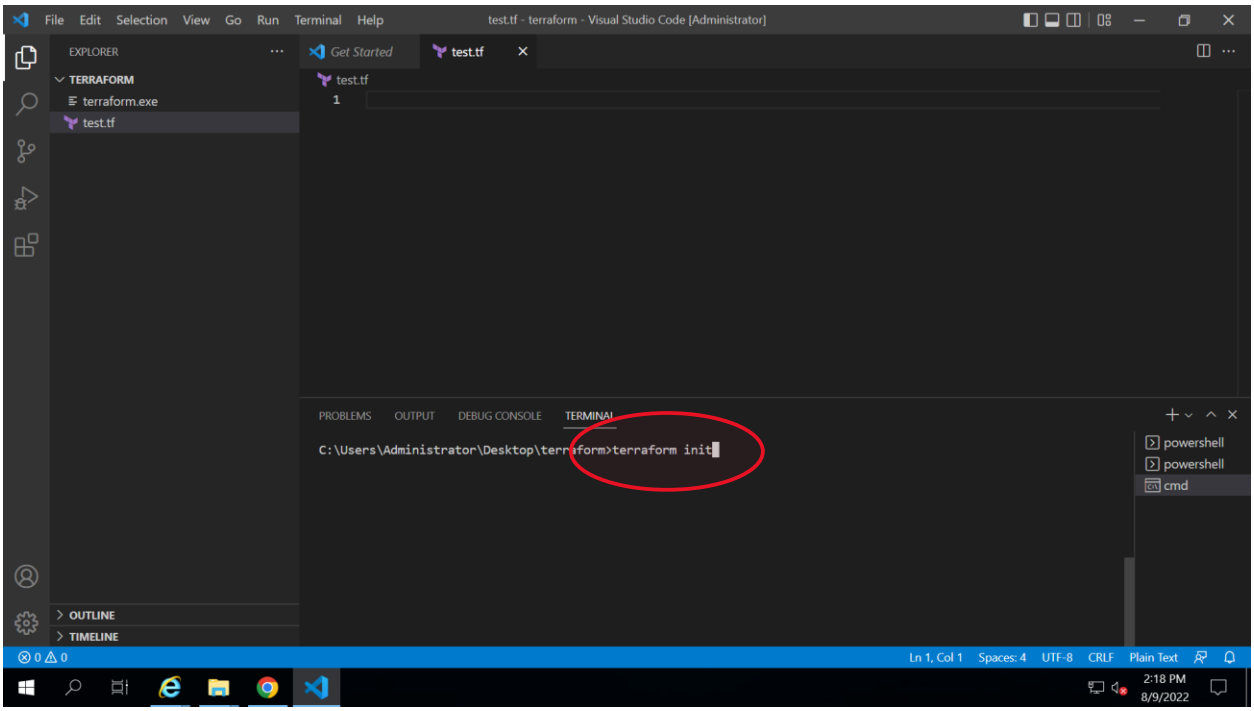
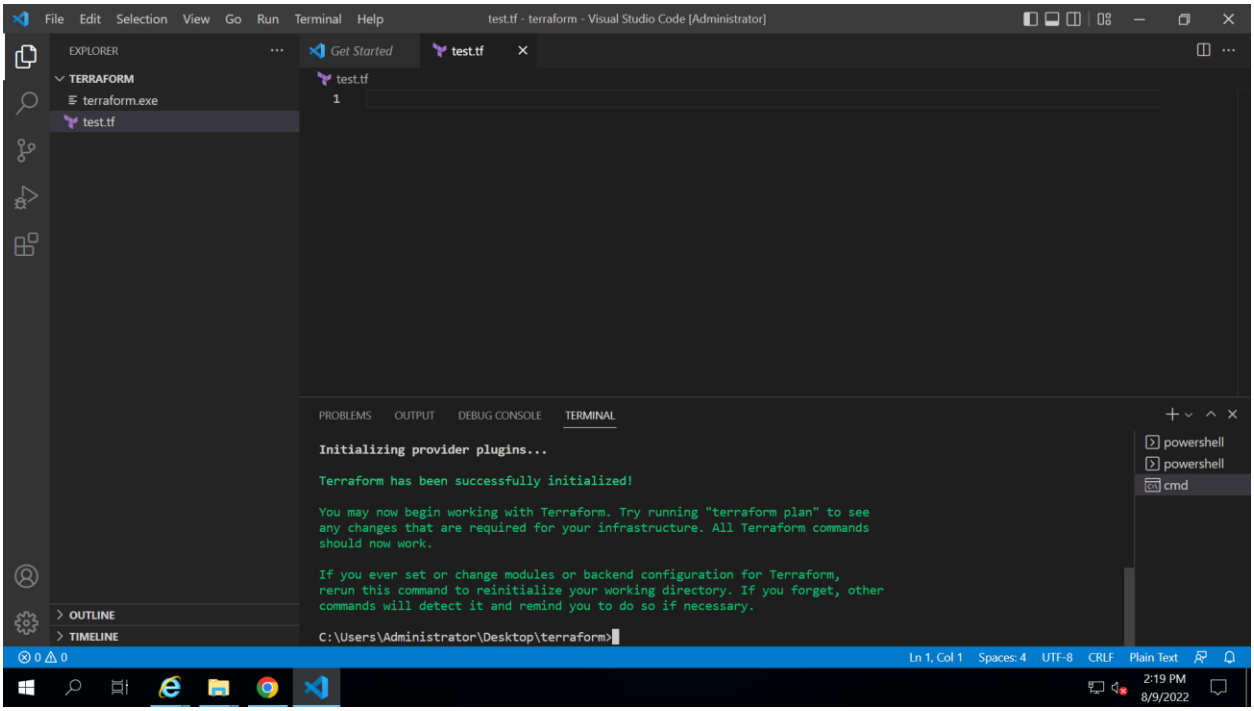
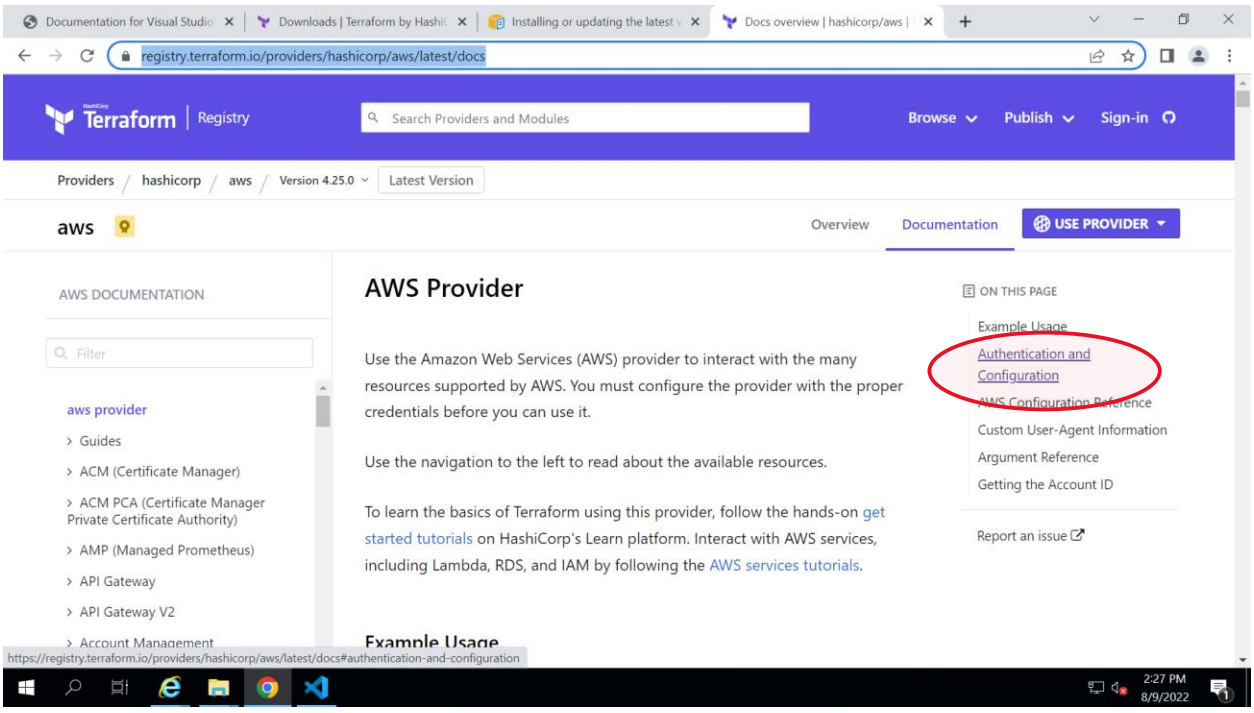




https://registry.terraform.io/providers/hashicorp/aws/latest/docs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Publish
Sign-in
Providers / hashicorp / aws / Version 4.25.0 Latest Version
aws
Overview
Documentation
USE PROVIDER
AWS DOCUMENTATION
Filter
aws provider
Guides
ACM (Certificate Manager)
ACM PCA (Certificate Manager Private Certificate Authority)
AMP (Managed Prometheus)
API Gateway
API Gateway V2
Account Management
AWS Provider
Use the Amazon Web Services (AWS) provider to interact with the many resources supported by AWS. You must configure the provider with the proper credentials before you can use it.
Use the navigation to the left to read about the available resources.
To learn the basics of Terraform using this provider, follow the hands-on get started tutorials on HashiCorp's Learn platform. Interact with AWS services, including Lambda, RDS, and IAM by following the AWS services tutorials.
Example Usage
ON THIS PAGE
Example Usage
Authentication and Configuration
AWS Configuration Reference
Custom User-Agent Information
Argument Reference
Getting the Account ID
Report an issue
https://registry.terraform.io/providers/hashicorp/aws/latest/docs#authentication-and-configuration
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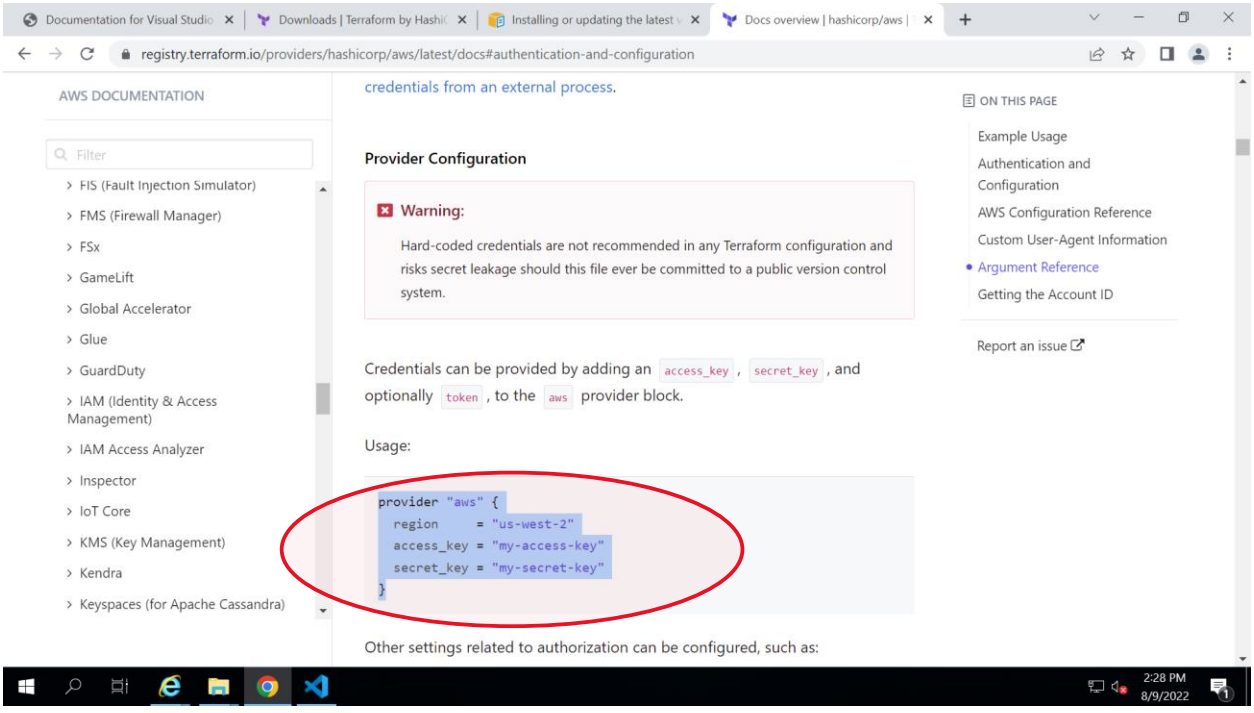
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Docs overview | hashicorp/aws |
registry.terraform.io/providers/hashicorp/aws/latest/docs#authentication-and-configuration
AWS DOCUMENTATION
Filter
FIS (Fault Injection Simulator)
FMS (Firewall Manager)
FSx
GameLift
Global Accelerator
Glue
GuardDuty
IAM (Identity & Access Management)
IAM Access Analyzer
Inspector
IoT Core
KMS (Key Management)
Kendra
Keyspaces (for Apache Cassandra)
credentials from an external process.
Provider Configuration
Warning:
Hard-coded credentials are not recommended in any Terraform configuration and risks secret leakage should this file ever be committed to a public version control system.
Credentials can be provided by adding an access_key , secret_key , and optionally token , to the aws provider block.
Usage:
provider "aws" {
region = "us-west-2"
access_key = "my-access-key"
secret_key = "my-secret-key"
}
Other settings related to authorization can be configured, such as:
ON THIS PAGE
Example Usage
Authentication and Configuration
AWS Configuration Reference
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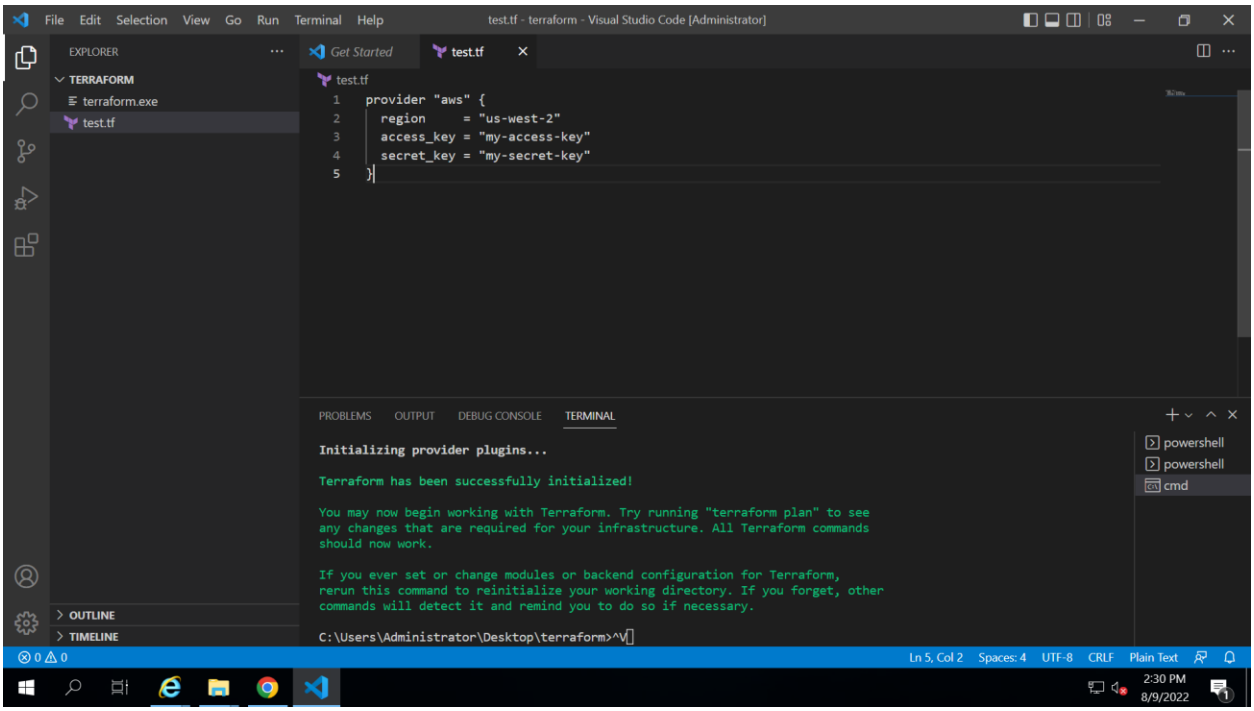
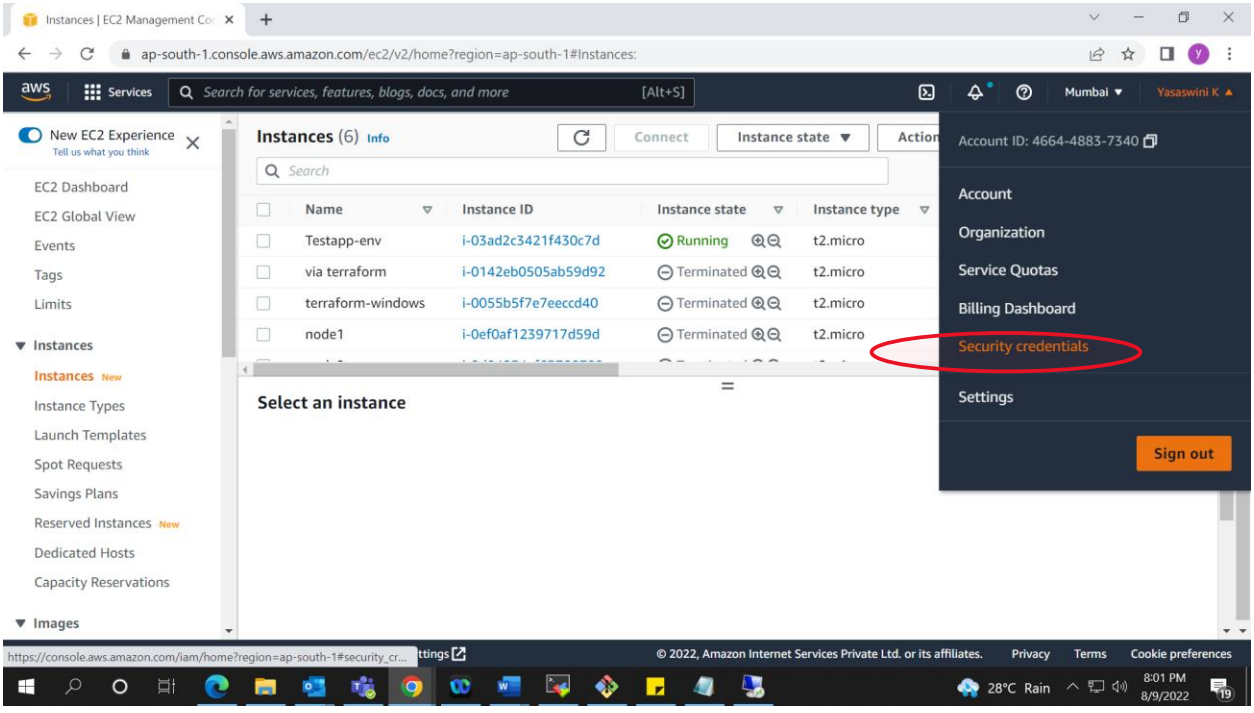

File Edit Selection View Go Run Terminal Help
test.tf - terraform - Visual Studio Code [Administrator]
EXPLORER
TERRAFORM
terraform.exe
test.tf
Get Started
test.tf
test.tf
1 provider "aws" {
2 region = "us-west-2"
3 access_key = "my-access-key"
4 secret_key = "my-secret-key"
5 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Initializing provider plugins...
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.
C:\Users\Administrator\Desktop\terraform>^V
powershell
powershell
cmd
OUTLINE
TIMELINE
Ln 5, Col 2 Spaces: 4 UTF-8 CRLF Plain Text
2:30 PM
8/9/2022


Instances | EC2 Management Co
ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Instances:
aws
Services
Search for services, features, blogs, docs, and more [Alt+S]
Mumbai
Yasaswini K
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Tags
Limits
Instances
Instances New
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances New
Dedicated Hosts
Capacity Reservations
Images
Instances (6) Info
Connect
Instance state
Search
Name
Instance ID
Instance state
Instance type
Testapp-env i-03ad2c3421f430c7d Running t2.micro
via terraform i-0142eb0505ab59d92 Terminated t2.micro
terraform-windows i-0055b5f7e7eeccd40 Terminated t2.micro
node1 i-0ef0af1239717d59d Terminated t2.micro
Select an instance
Account ID: 4664-4883-7340
Account
Organization
Service Quotas
Billing Dashboard
Security credentials
Settings
Sign out
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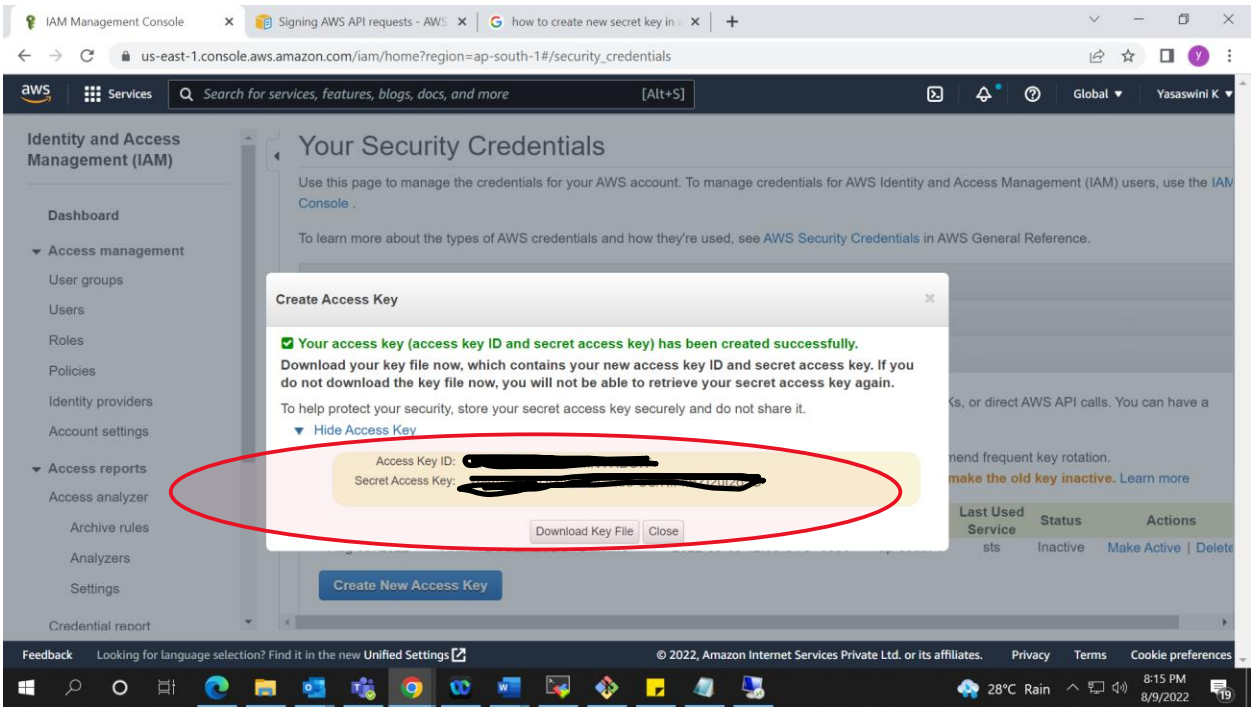
Privacy
Terms
Cookie preferences
https://console.aws.amazon.com/iam/home?region=ap-south-1#security_cr...
28°C Rain
8:01 PM
8/9/2022


IAM Management Console
Signing AWS API requests - AWS
how to create new secret key in
us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/security_credentials
Services
Search for services, features, blogs, docs, and more
[Alt+S]
Global
Yasaswini K
Identity and Access Management (IAM)
Dashboard
Access management
User groups
Users
Roles
Policies
Identity providers
Account settings
Access reports
Access analyzer
Archive rules
Analyzers
Settings
Credential report
Your Security Credentials
Use this page to manage the credentials for your AWS account. To manage credentials for AWS Identity and Access Management (IAM) users, use the IAM Console .
To learn more about the types of AWS credentials and how they're used, see AWS Security Credentials in AWS General Reference.
Create Access Key
Your access key (access key ID and secret access key) has been created successfully.
Download your key file now, which contains your new access key ID and secret access key. If you do not download the key file now, you will not be able to retrieve your secret access key again.
To help protect your security, store your secret access key securely and do not share it.
Hide Access Key
Access Key ID:
Secret Access Key:
Download Key File
Close
Last Used Service
Status
Actions
Inactive
Make Active | Delete
Create New Access Key
Feedback
Looking for language selection? Find it in the new Unified Settings
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences
28°C Rain
8:15 PM
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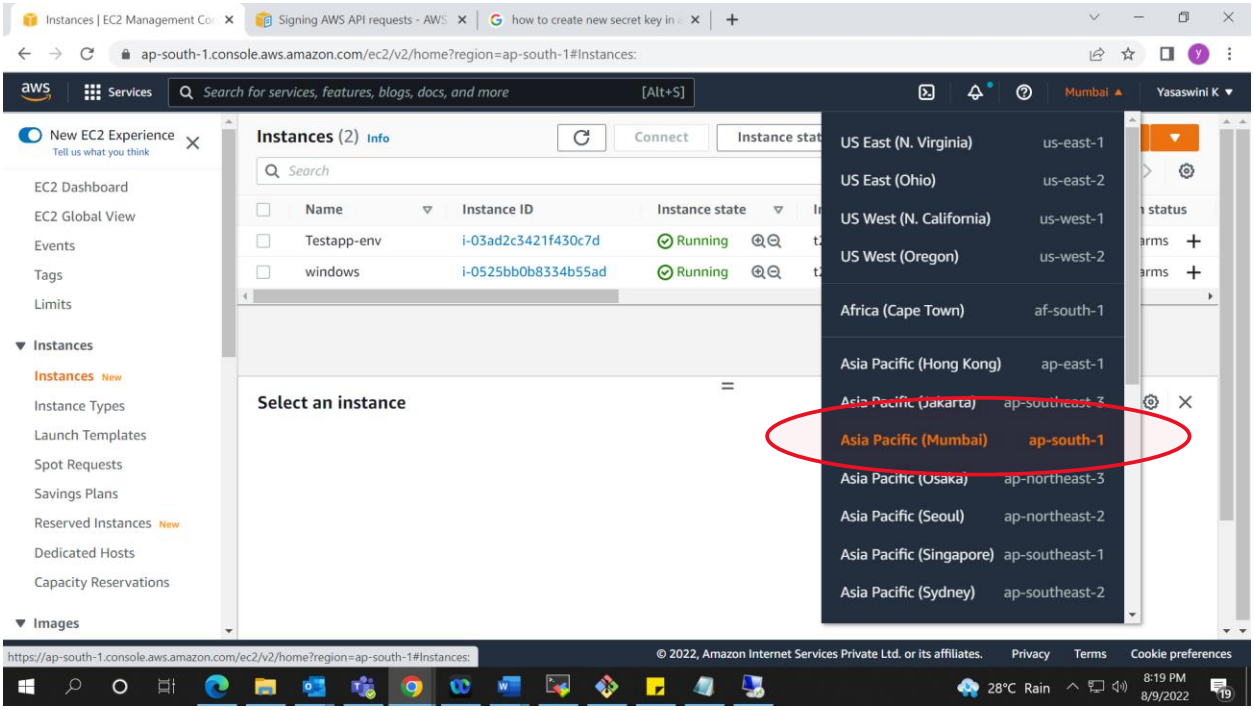
Instances | EC2 Management Co
Signing AWS API requests - AWS
how to create new secret key in
ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Instances:
Services
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[Alt+S]
Mumbai
Yasaswini K
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Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Tags
Limits
Instances
Instances New
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances New
Dedicated Hosts
Capacity Reservations
Images
Instances (2) Info
Connect
Search
Name
Instance ID
Instance state
Testapp-env
i-03ad2c3421f430c7d
Running
windows
i-0525bb0b8334b55ad
Running
Select an instance
US East (N. Virginia) us-east-1
US East (Ohio) us-east-2
US West (N. California) us-west-1
US West (Oregon) us-west-2
Africa (Cape Town) af-south-1
Asia Pacific (Hong Kong) ap-east-1
Asia Pacific (Jakarta) ap-southeast-3
Asia Pacific (Mumbai) ap-south-1
Asia Pacific (Osaka) ap-northeast-3
Asia Pacific (Seoul) ap-northeast-2
Asia Pacific (Singapore) ap-southeast-1
Asia Pacific (Sydney) ap-southeast-2
https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Instances:
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Privacy
Terms
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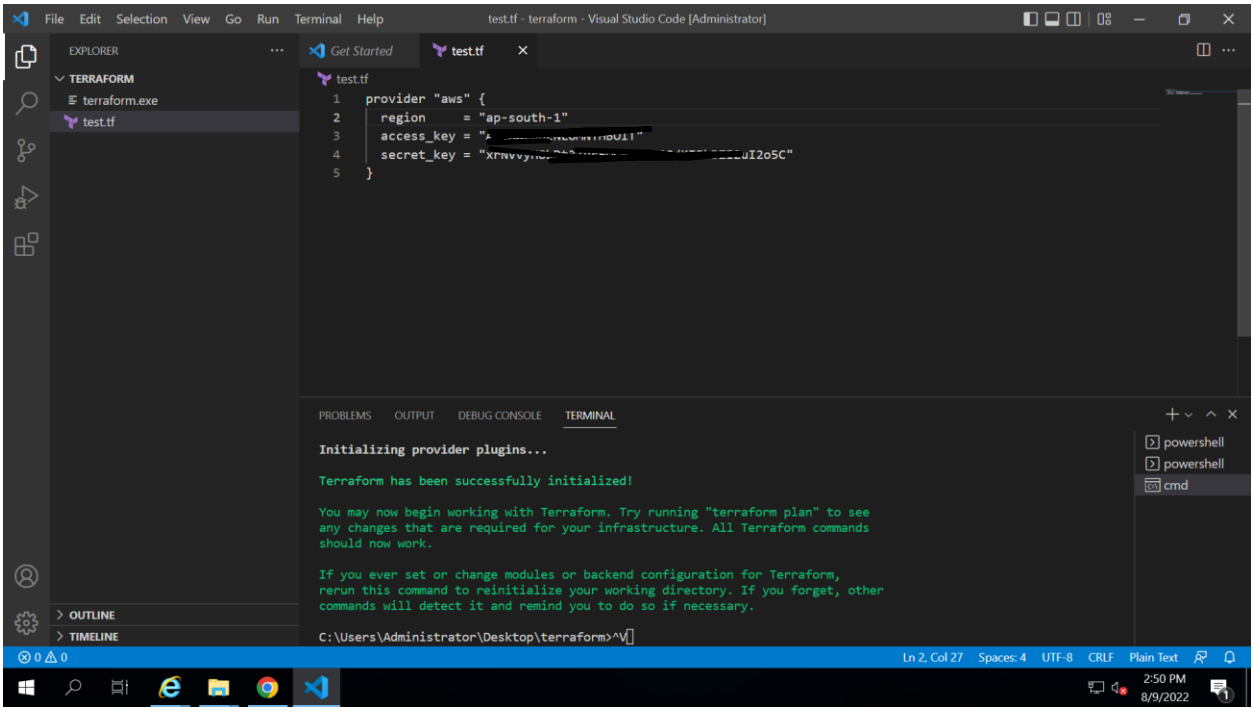
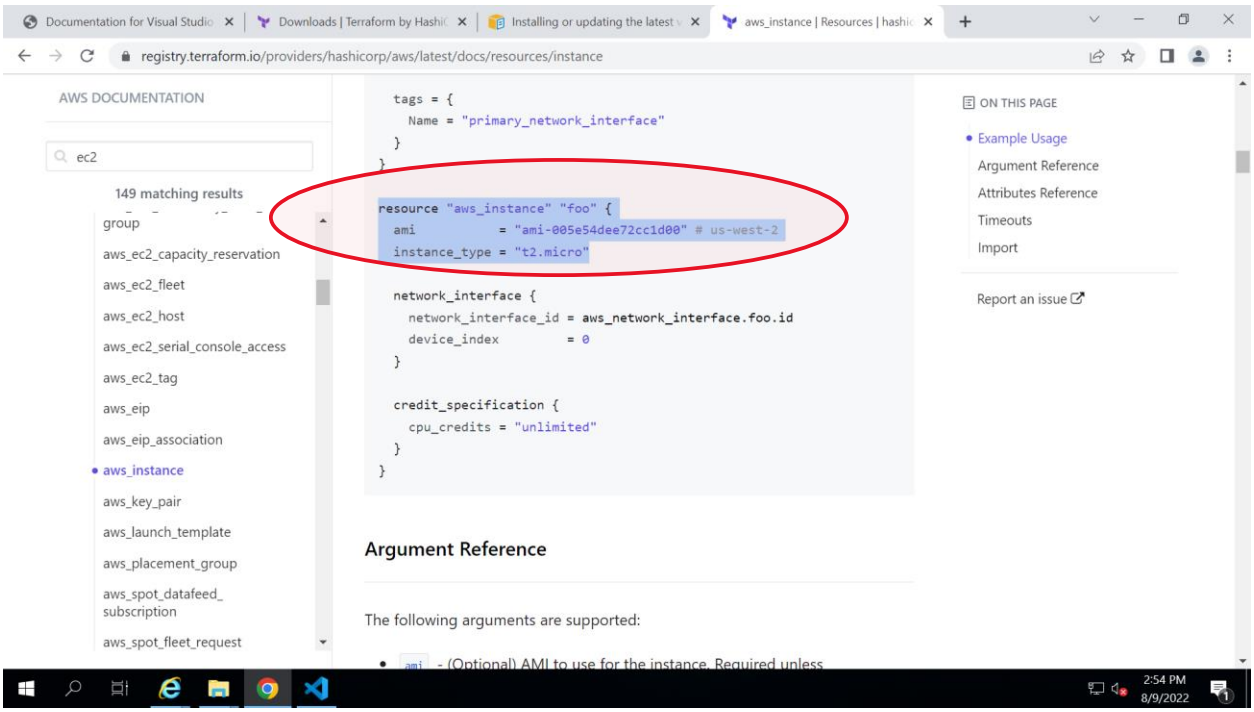
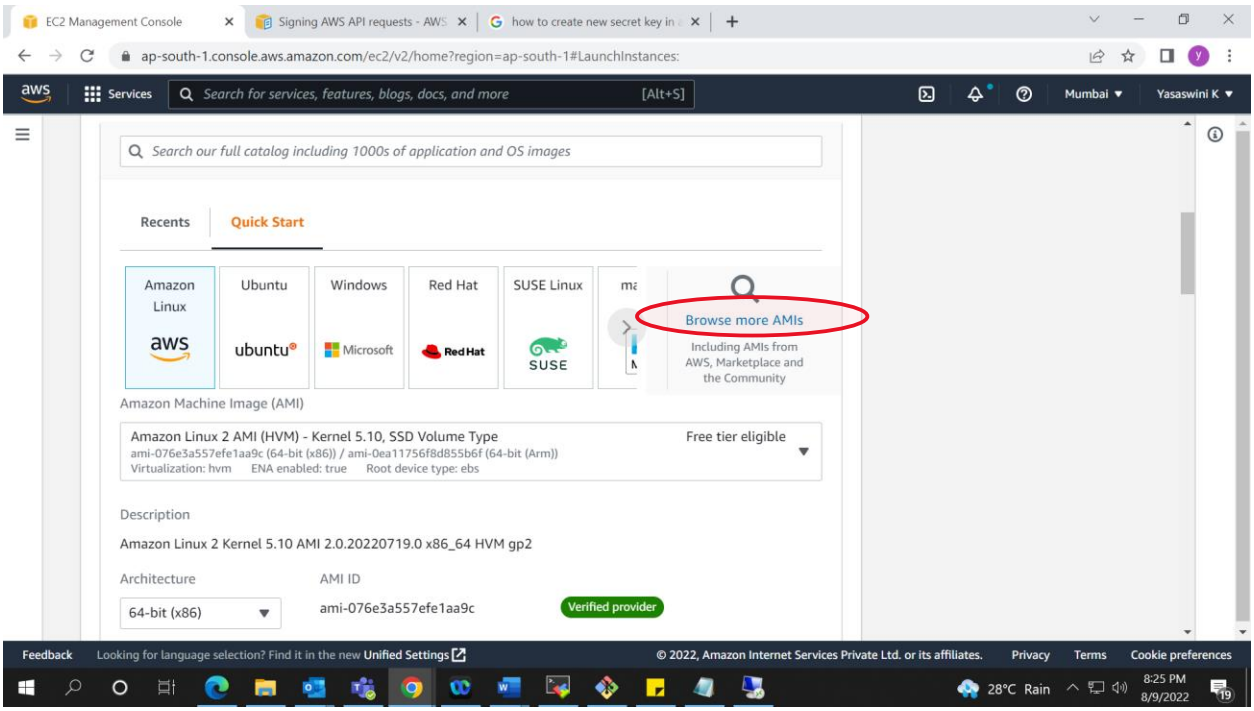
28°C Rain
8:19 PM
8/9/2022

Copy the access_key, Secret_key and region into VS






EC2 Management Console
Signing AWS API requests - AWS
how to create new secret key in
ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstances:
Services
Search for services, features, blogs, docs, and more
[Alt+S]
Mumbai
Yasaswini K
Search our full catalog including 1000s of application and OS images
Recents
Quick Start
Amazon Linux
Ubuntu
Windows
Red Hat
SUSE Linux
Browse more AMIs
Including AMIs from AWS, Marketplace and the Community
Amazon Machine Image (AMI)
Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type
ami-076e3a557efe1aa9c (64-bit (x86)) / ami-0ea11756f8d855b6f (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs
Free tier eligible
Description
Amazon Linux 2 Kernel 5.10 AMI 2.0.20220719.0 x86_64 HVM gp2
Architecture
64-bit (x86)
AMI ID
ami-076e3a557efe1aa9c
Verified provider
Feedback
Looking for language selection? Find it in the new Unified Settings
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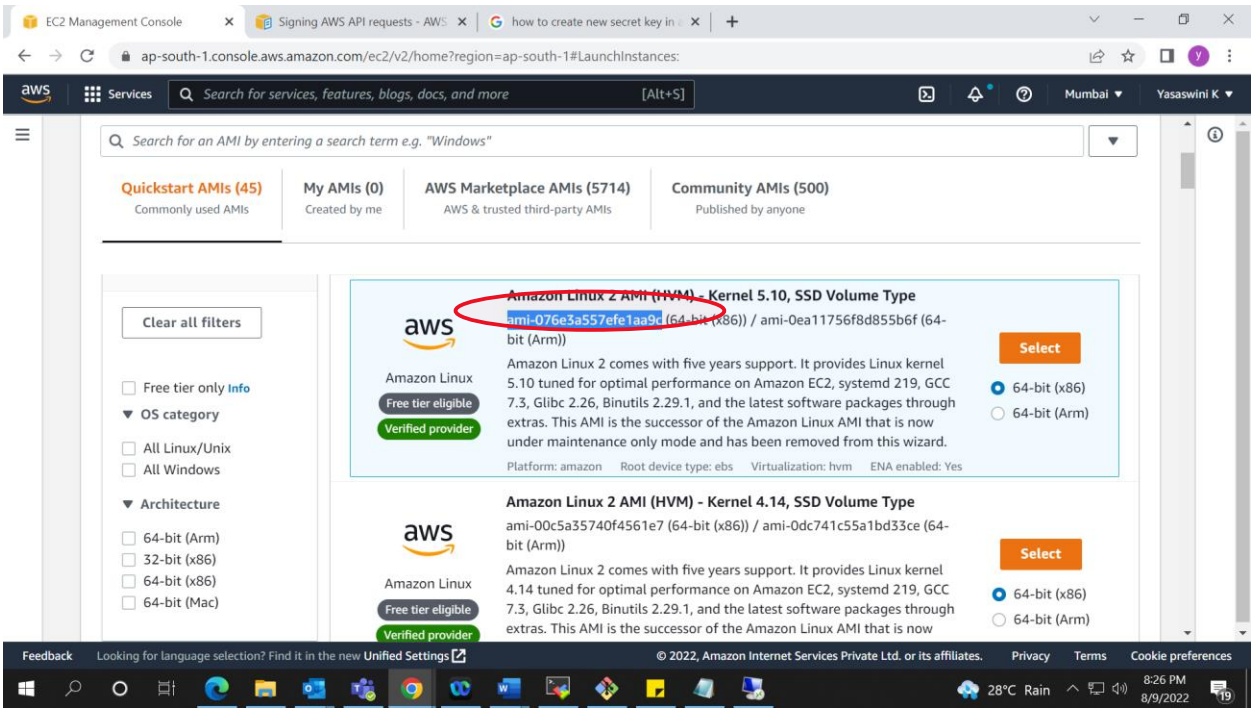
Privacy
Terms
Cookie preferences
28°C Rain
8:25 PM
8/9/2022


EC2 Management Console
Signing AWS API requests - AWS
how to create new secret key in
ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstances:
Services
Search for services, features, blogs, docs, and more
[Alt+S]
Mumbai
Yasaswini K
Search for an AMI by entering a search term e.g. "Windows"
Quickstart AMIs (45)
Commonly used AMIs
My AMIs (0)
Created by me
AWS Marketplace AMIs (5714)
AWS & trusted third-party AMIs
Community AMIs (500)
Published by anyone
Clear all filters
Free tier only Info
OS category
All Linux/Unix
All Windows
Architecture
64-bit (Arm)
32-bit (x86)
64-bit (x86)
64-bit (Mac)
Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type
ami-076e3a557efe1aa9c (64-bit (x86)) / ami-0ea11756f8d855b6f (64-bit (Arm))
Amazon Linux
Free tier eligible
Verified provider
Amazon Linux 2 comes with five years support. It provides Linux kernel 5.10 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras. This AMI is the successor of the Amazon Linux AMI that is now under maintenance only mode and has been removed from this wizard.
Platform: amazon Root device type: ebs Virtualization: hvm ENA enabled: Yes
Select
64-bit (x86)
64-bit (Arm)
Amazon Linux 2 AMI (HVM) - Kernel 4.14, SSD Volume Type
ami-00c5a35740f4561e7 (64-bit (x86)) / ami-0dc741c55a1bd33ce (64-bit (Arm))
Amazon Linux
Free tier eligible
Verified provider
Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras. This AMI is the successor of the Amazon Linux AMI that is now
Select
64-bit (x86)
64-bit (Arm)
Feedback
Looking for language selection? Find it in the new Unified Settings
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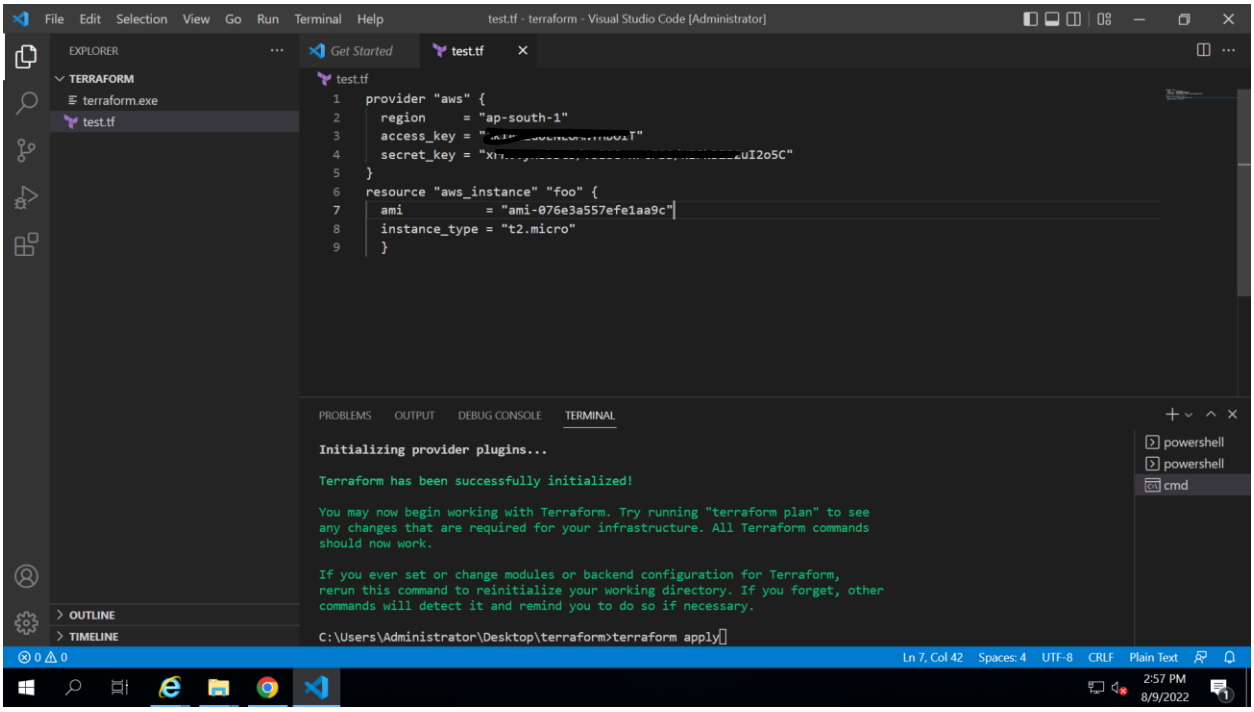
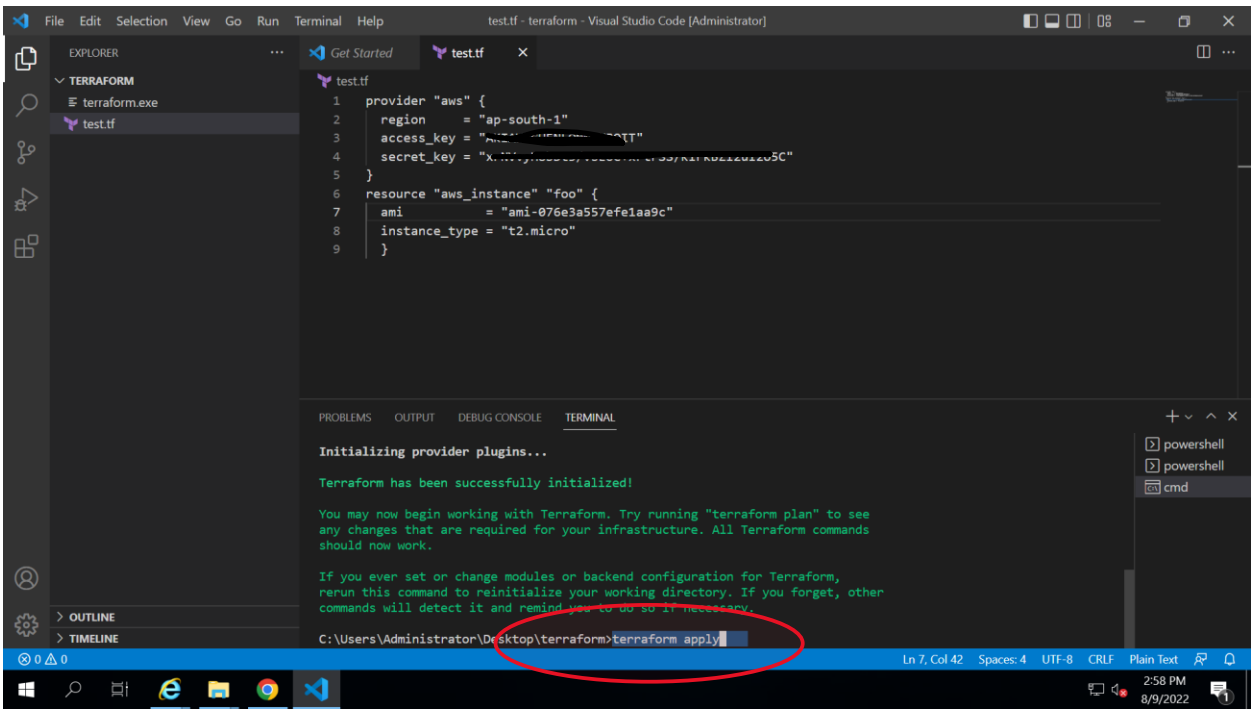
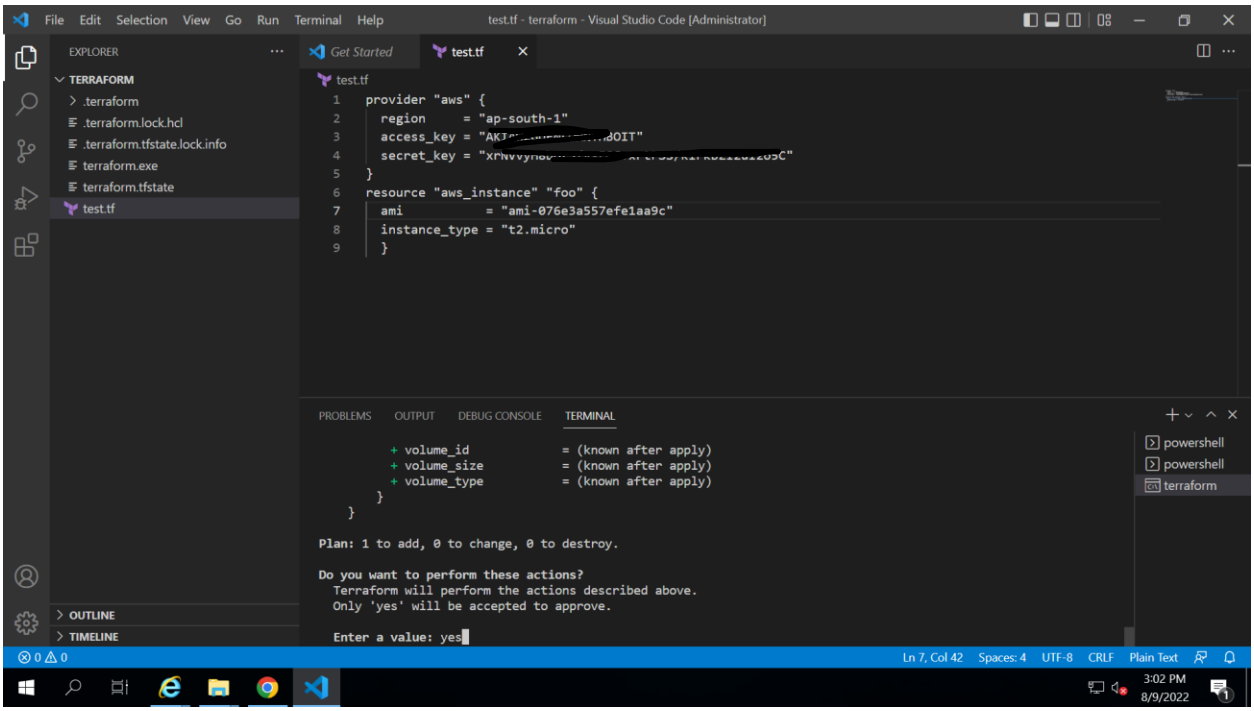
Cookie preferences
28°C Rain
8:26 PM
8/9/2022

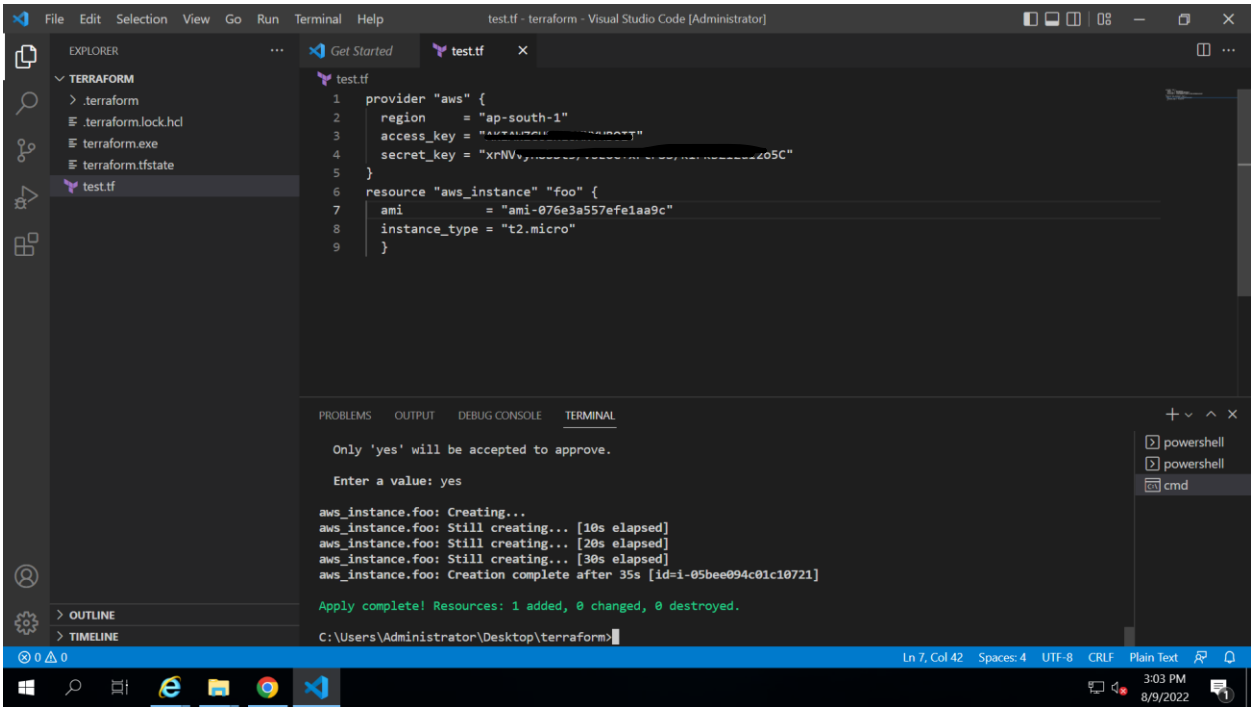
Copy and past the ami details and provide which instance type we have to launch



Make sure to save the file and run terraform init first and then terraform apply next




File Edit Selection View Go Run Terminal Help
test.tf - terraform - Visual Studio Code [Administrator]
EXPLORER
TERRAFORM
.terraform
.terraform.lock.hcl
.terraform.tfstate.lock.info
terraform.exe
terraform.tfstate
test.tf
Get Started
test.tf
provider "aws" {
region = "ap-south-1"
access_key = "AKT[redacted]dOIT"
secret_key = "xRNvVyRaD[redacted]2o5C"
}
resource "aws_instance" "foo" {
ami = "ami-076e3a557efe1aa9c"
instance_type = "t2.micro"
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
+ volume_id = (known after apply)
+ volume_size = (known after apply)
+ volume_type = (known after apply)
}
}
Plan: 1 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
powershell
powershell
terraform
OUTLINE
TIMELINE
Ln 7, Col 42 Spaces: 4 UTF-8 CRLF Plain Text
3:02 PM
8/9/2022


File Edit Selection View Go Run Terminal Help
test.tf - terraform - Visual Studio Code [Administrator]
EXPLORER
TERRAFORM
.terraform
.terraform.lock.hcl
terraform.exe
terraform.tfstate
test.tf
Get Started
test.tf
provider "aws" {
region = "ap-south-1"
access_key = "[redacted]"
secret_key = "xRNV[redacted]2o5C"
}
resource "aws_instance" "foo" {
ami = "ami-076e3a557efe1aa9c"
instance_type = "t2.micro"
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Only 'yes' will be accepted to approve.
Enter a value: yes
aws_instance.foo: Creating...
aws_instance.foo: Still creating... [10s elapsed]
aws_instance.foo: Still creating... [20s elapsed]
aws_instance.foo: Still creating... [30s elapsed]
aws_instance.foo: Creation complete after 35s [id=i-05bee094c01c10721]
Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
C:\Users\Administrator\Desktop\terraform>
powershell
powershell
cmd
OUTLINE
TIMELINE
Ln 7, Col 42 Spaces: 4 UTF-8 CRLF Plain Text
3:03 PM
8/9/2022

We can see that instance is created and running in the specified region