

ASSIGNMENT

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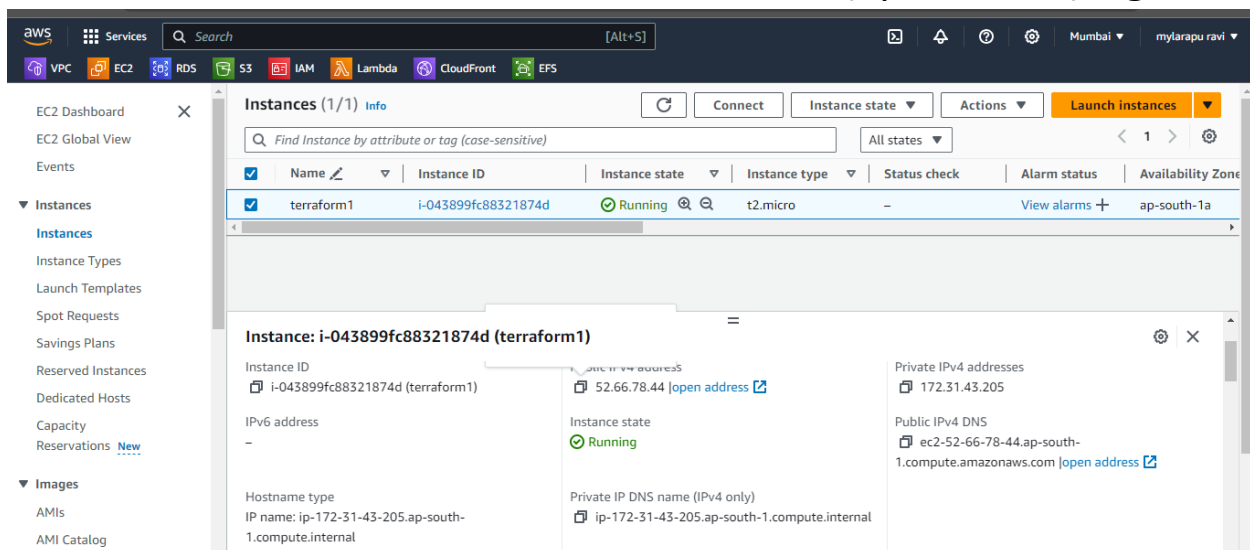
E-Mail :ravimylarapu39@gmail.com

Batch : 119

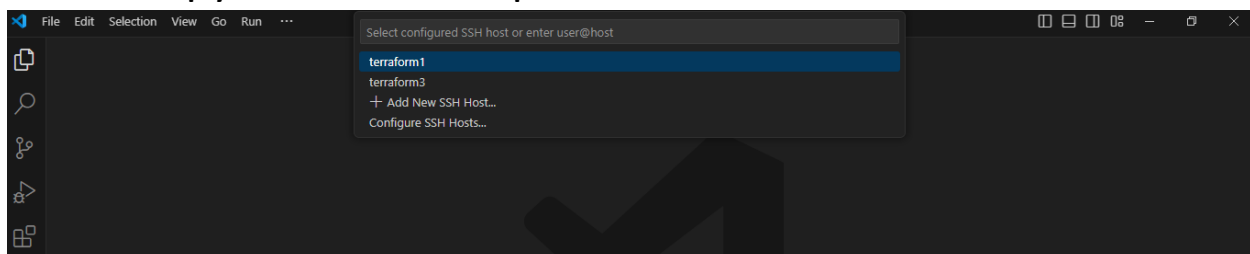
Ph.no : 6302540471

Assignment: create s3 bucket and upload a file using terraform

1.first create one new instance in Mumbai (ap-south-1)region

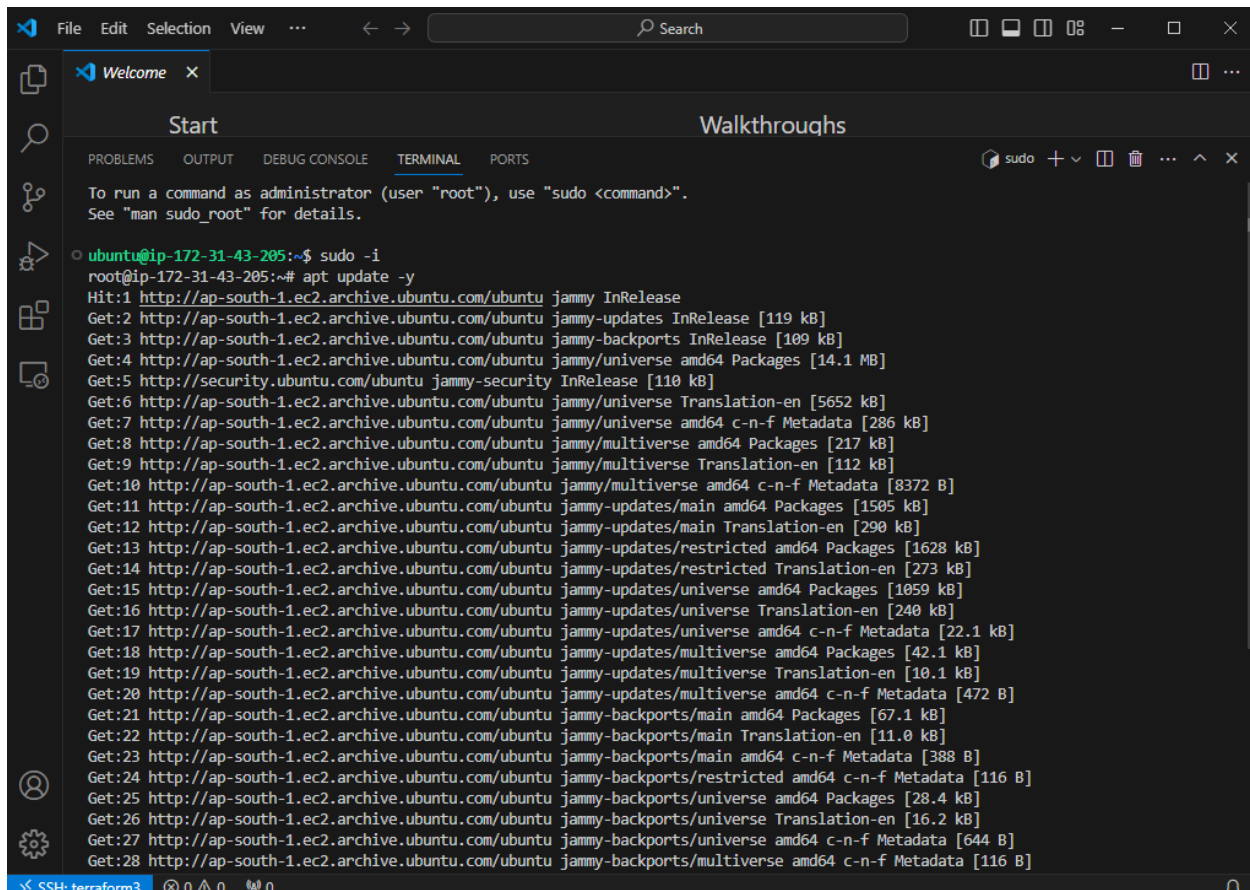


2.next copy the ssh client path connect to visual studio code



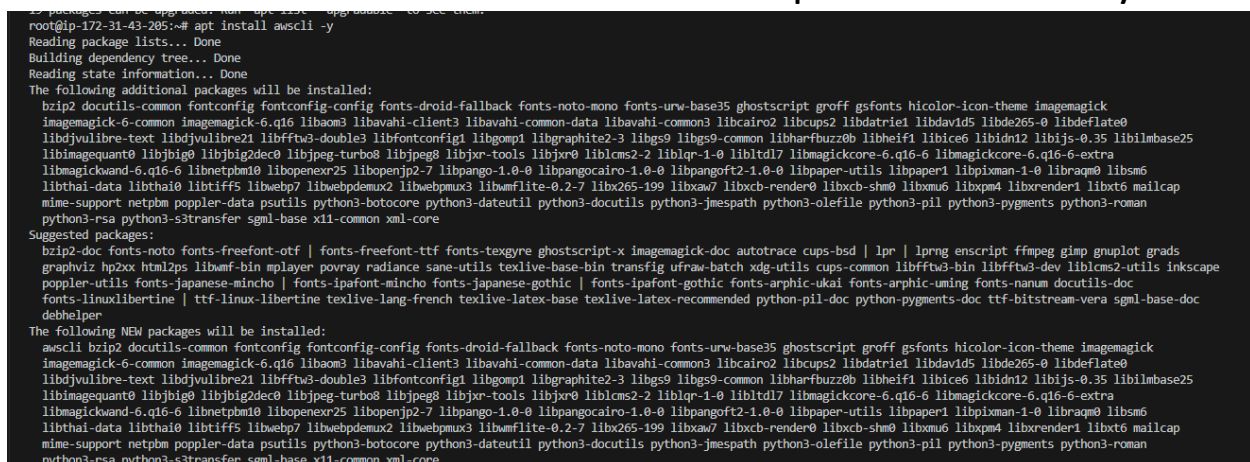
3.next go root user and next use the command apt update -y (why to apt command we are select the ubuntu tool) this

command used to update background packages



```
File Edit Selection View ... Search
Welcome x
Start Walkthroughs
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
ubuntu@ip-172-31-43-205:~$ sudo -i
root@ip-172-31-43-205:~# apt update -y
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1505 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [290 kB]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [1628 kB]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [273 kB]
Get:15 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1059 kB]
Get:16 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [240 kB]
Get:17 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [22.1 kB]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [42.1 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [10.1 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [472 B]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [67.1 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.0 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.4 kB]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.2 kB]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
```

4.next install aws cli use the command apt install awscli -y



```
15 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ip-172-31-43-205:~# apt install awscli -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bzip2 docutils-common fontconfig fontconfig-config fonts-droid-fallback fonts-noto-mono fonts-urw-base35 ghostscript groff gsfonts hicolor-icon-theme imagemagick
  imagemagick-6-common imagemagick-6.q16 libaom3 libavahi-client3 libavahi-common-data libavahi-common3 libcairo2 libcups2 libdatatriel libdav1d5 libde265-0 libdeflate0
  libdjvulibre-text libdjvulibre21 libfftw3-double3 libfontconfig1 libgomp1 libgraphite2-3 libgs9 libgs9-common libharfbuzz0b libheif1 libice6 libidn2 libijs-0.35 libilmbase25
  libimagequant0 libjbig0 libjbig2dec0 libjpeg-turbo8 libjpeg8 libjxr-tools libjxr0 liblcms2-2 liblqr-1-0 libltdl7 libmagickcore-6.q16-6 libmagickcore-6.q16-6-extra
  libmagickwand-6.q16-6 libnetpbm10 libopenexr25 libopenjp2-7 libpango-1.0-0 libpangocairo-1.0-0 libpangoft2-1.0-0 libpaper-utils libpaper1 libpixman-1-0 libraqm0 libsm6
  libthai-data libthai0 libtiff5 libwebp7 libwebpdemux2 libwebpmux3 libwmf-lite-0.2-7 libx265-199 libxaw7 libxcb-render0 libxcb-shm0 libxmu6 libxpm4 libxrender1 libxt6 mailcap
  mime-support netpbm poppler-data psutils python3-boto-core python3-dateutil python3-docutils python3-jmespath python3-olefile python3-pil python3-pygments python3-roman
  python3-rsa python3-s3transfer sgml-base x11-common xml-core
Suggested packages:
  bzip2-doc fonts-noto fonts-freefont-otf | fonts-freefont-ttf fonts-texgyre ghostscript-x imagemagick-doc autotrace cups-bsd | lpr | lprng enscript ffmpeg gimp gnuplot grads
  graphviz hp2xx html2ps libwmf-bin mplayer povray radiance sane-utils texlive-base-bin transfig ufrax-batch xdg-utils cups-common libfftw3-bin libfftw3-dev liblcms2-utils inkscape
  poppler-utils fonts-japanese-mincho | fonts-ipafont-mincho fonts-japanese-gothic | fonts-ipafont-gothic fonts-arphic-ukai fonts-arphic-uming fonts-nanum docutils-doc
  fonts-linuxlibertine | ttf-linux-libertine texlive-lang-french texlive-latex-base texlive-latex-recommended python-pil-doc python-pygments-doc ttf-bitstream-vera sgml-base-doc
  debhelper
The following NEW packages will be installed:
  awscli bzip2 docutils-common fontconfig fontconfig-config fonts-droid-fallback fonts-noto-mono fonts-urw-base35 ghostscript groff gsfonts hicolor-icon-theme imagemagick
  imagemagick-6-common imagemagick-6.q16 libaom3 libavahi-client3 libavahi-common-data libavahi-common3 libcairo2 libcups2 libdatatriel libdav1d5 libde265-0 libdeflate0
  libdjvulibre-text libdjvulibre21 libfftw3-double3 libfontconfig1 libgomp1 libgraphite2-3 libgs9 libgs9-common libharfbuzz0b libheif1 libice6 libidn2 libijs-0.35 libilmbase25
  libimagequant0 libjbig0 libjbig2dec0 libjpeg-turbo8 libjpeg8 libjxr-tools libjxr0 liblcms2-2 liblqr-1-0 libltdl7 libmagickcore-6.q16-6 libmagickcore-6.q16-6-extra
  libmagickwand-6.q16-6 libnetpbm10 libopenexr25 libopenjp2-7 libpango-1.0-0 libpangocairo-1.0-0 libpangoft2-1.0-0 libpaper-utils libpaper1 libpixman-1-0 libraqm0 libsm6
  libthai-data libthai0 libtiff5 libwebp7 libwebpdemux2 libwebpmux3 libwmf-lite-0.2-7 libx265-199 libxaw7 libxcb-render0 libxcb-shm0 libxmu6 libxpm4 libxrender1 libxt6 mailcap
  mime-support netpbm poppler-data psutils python3-boto-core python3-dateutil python3-docutils python3-jmespath python3-olefile python3-pil python3-pygments python3-roman
  python3-rsa python3-s3transfer sgml-base x11-common xml-core
```

5.next go to web and search terraform install in ubuntu

```
13 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ip-172-31-43-205:~# apt install awscli -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bzip2 docutils-common fontconfig fontconfig-config fonts-droid-fallback fonts-noto-mono fonts-urw-base35 ghostscript groff gsfonts hicolor-icon-theme imagemagick
  imagemagick-6-common imagemagick-6.q16 libaom3 libavahi-client3 libavahi-common-data libavahi-common3 libcairo2 libcups2 libdatatrie1 libday1d5 libde265-0 libdeflate0
  libdjvulibre-text libdjvulibre21 libfftw3-double3 libfontconfig1 libgomp1 libgraphite2-3 libgs9 libgs9-common libharfbuzz0b libheif1 libice6 libidn2 libijs-0.35 libilmbase25
  libimagequant0 libjbig0 libjbig2dec0 libjpeg-turbo8 libjpeg8 libjxr-tools libjxr0 liblcms2-2 liblqr-1-0 libltdl7 libmagickcore-6.q16-6 libmagickcore-6.q16-6-extra
  libmagickwand-6.q16-6 libnetpbm10 libopenexr25 libopenjp2-7 libpango-1.0-0 libpangocairo-1.0-0 libpangoft2-1.0-0 libpaper-utils libpaper1 libpixman-1-0 libraqm0 libsm6
  libthai-data libthai0 libtiff5 libwebp7 libwebpdemux2 libwebpmux3 libwmf-lite-0.2-7 libx265-199 libxaw7 libxcb-render0 libxcb-shm0 libxmu6 libxpm4 libxrender1 libxt6 mailcap
  mime-support netpbm poppler-data psutils python3-boto python3-dateutil python3-docutils python3-jmespath python3-olefile python3-pil python3-pygments python3-roman
  python3-rsa python3-s3transfer sgml-base x11-common xml-core
Suggested packages:
  bzip2-doc fonts-noto fonts-freefont-otf | fonts-freefont-ttf fonts-texgyre ghostscript-x imagemagick-doc autotrace cups-bsd | lpr | lprng enscript ffmpeg gimp gnuplot grads
  graphviz hp2xhtml2ps libwmf-bin mplayer povray radiance sane-utils texlive-base-bin transfig ufrax-batch xdg-utils cups-common libfftw3-bin libfftw3-dev liblcms2-utils inkscape
  poppler-utils fonts-japanese-mincho | fonts-ipafont-mincho fonts-japanese-gothic | fonts-ipafont-gothic fonts-arphic-ukai fonts-arphic-uming fonts-nanum docutils-doc
  fonts-linuxlibertine | ttf-linux-libertine texlive-lang-french texlive-latex-base texlive-latex-recommended python-pil-doc python-pygments-doc ttf-bitstream-vera sgml-base-doc
  debhelper
The following NEW packages will be installed:
  awscli bzip2 docutils-common fontconfig fontconfig-config fonts-droid-fallback fonts-noto-mono fonts-urw-base35 ghostscript groff gsfonts hicolor-icon-theme imagemagick
  imagemagick-6-common imagemagick-6.q16 libaom3 libavahi-client3 libavahi-common-data libavahi-common3 libcairo2 libcups2 libdatatrie1 libday1d5 libde265-0 libdeflate0
  libdjvulibre-text libdjvulibre21 libfftw3-double3 libfontconfig1 libgomp1 libgraphite2-3 libgs9 libgs9-common libharfbuzz0b libheif1 libice6 libidn2 libijs-0.35 libilmbase25
  libimagequant0 libjbig0 libjbig2dec0 libjpeg-turbo8 libjpeg8 libjxr-tools libjxr0 liblcms2-2 liblqr-1-0 libltdl7 libmagickcore-6.q16-6 libmagickcore-6.q16-6-extra
  libmagickwand-6.q16-6 libnetpbm10 libopenexr25 libopenjp2-7 libpango-1.0-0 libpangocairo-1.0-0 libpangoft2-1.0-0 libpaper-utils libpaper1 libpixman-1-0 libraqm0 libsm6
  libthai-data libthai0 libtiff5 libwebp7 libwebpdemux2 libwebpmux3 libwmf-lite-0.2-7 libx265-199 libxaw7 libxcb-render0 libxcb-shm0 libxmu6 libxpm4 libxrender1 libxt6 mailcap
  mime-support netpbm poppler-data psutils python3-boto python3-dateutil python3-docutils python3-jmespath python3-olefile python3-pil python3-pygments python3-roman
  python3-rsa python3-s3transfer sgml-base x11-common xml-core
```

6.next aws configure (pass access key, secret key,region,format)

```
Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-43-205:~# aws configure
AWS Access Key ID [None]: AKIA6ODU6MFA7YNIIJHS
AWS Secret Access Key [None]: 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
Default region name [None]: ap-region-1
Default output format [None]: table
root@ip-172-31-43-205:~#
```

7.mkdir terraform cd terraform

```
Get:1 https://apt.releases.hashicorp.com jammy/main amd64 terraform 1.7.5-1 [100MB]
Fetched 26.9 MB in 0s (84.5 MB/s)
Selecting previously unselected package terraform.
(Reading database ... 76791 files and directories currently installed.)
Preparing to unpack .../terraform_1.7.5-1_amd64.deb ...
Unpacking terraform (1.7.5-1) ...
Setting up terraform (1.7.5-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

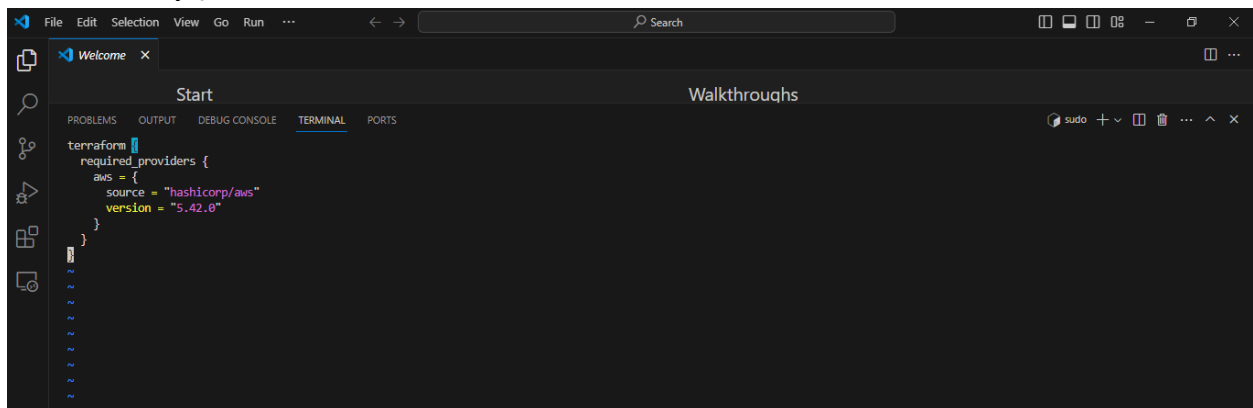
No services need to be restarted.

No containers need to be restarted.

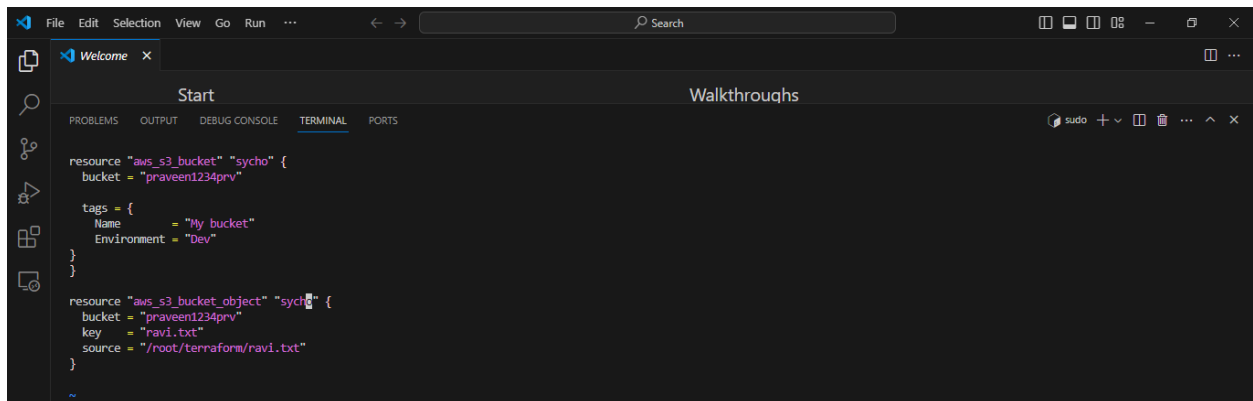
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this platform
root@ip-172-31-43-205:~# aws configure
AWS Access Key ID [None]: AKIA6ODU6MFA7YNIIJHS
AWS Secret Access Key [None]: helxJtw72A5J/zMmnogB4iB1LwyC/yFGgP2y6Z
Default region name [None]: ap-region-1
Default output format [None]: table
root@ip-172-31-43-205:~# mkdir terraform
root@ip-172-31-43-205:~# cd terraform
root@ip-172-31-43-205:~/terraform#
```

8.create a provierblock.tf (we get code from terraform hashicorp)



9.now create a resource_block.tf go to web search the terraform s3 bucket creating and upload file



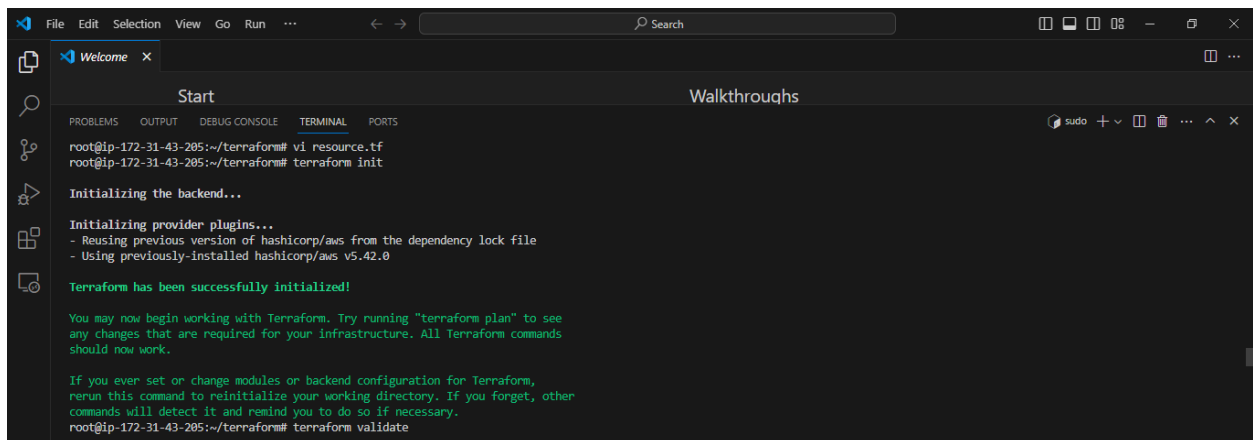
```
resource "aws_s3_bucket" "sycho" {
  bucket = "praveen1234prv"

  tags = {
    Name      = "My bucket"
    Environment = "Dev"
  }
}

resource "aws_s3_bucket_object" "sycho" {
  bucket = "praveen1234prv"
  key    = "ravi.txt"
  source = "/root/terraform/ravi.txt"
}
```

10.next terraform fmt

Terraform init



```
root@ip-172-31-43-205:~/terraform# vi resource.tf
root@ip-172-31-43-205:~/terraform# terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v5.42.0

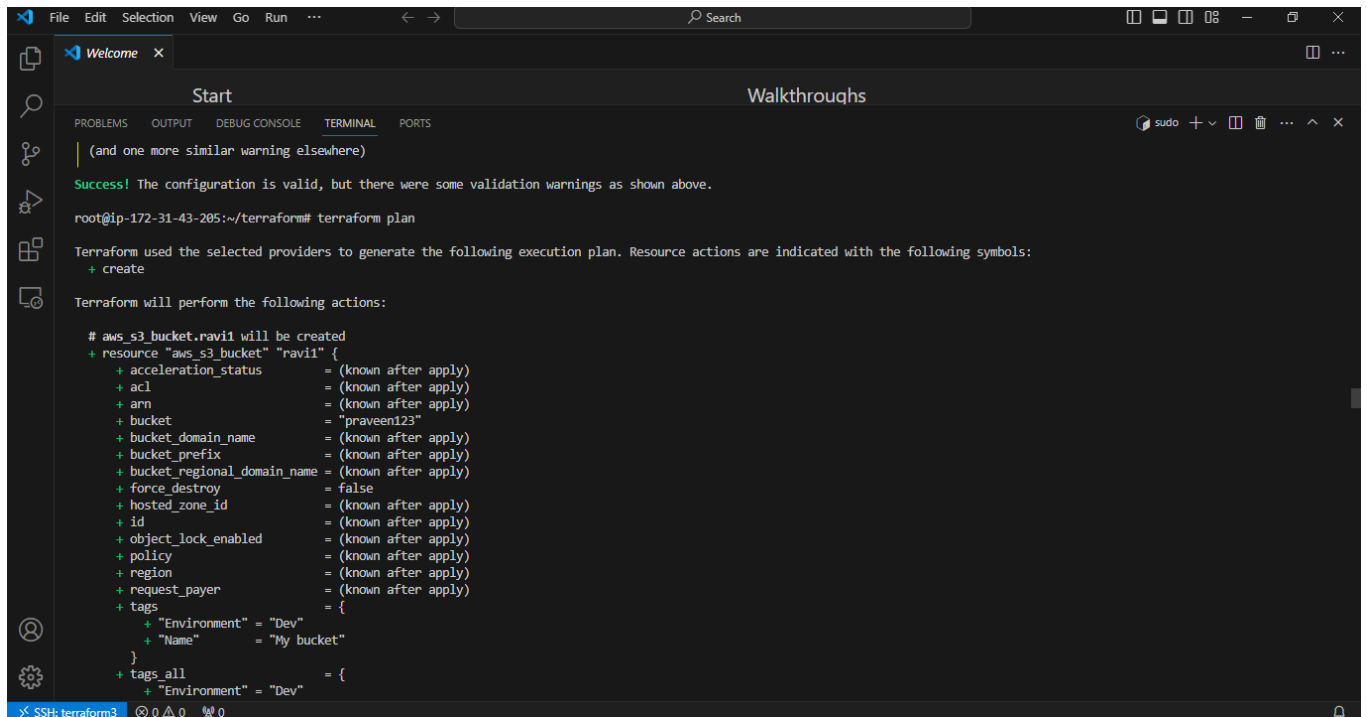
Terraform has been successfully initialized!

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.
root@ip-172-31-43-205:~/terraform# terraform validate
```

Terraform validate

Terraform plan



The screenshot shows a terminal window with the following content:

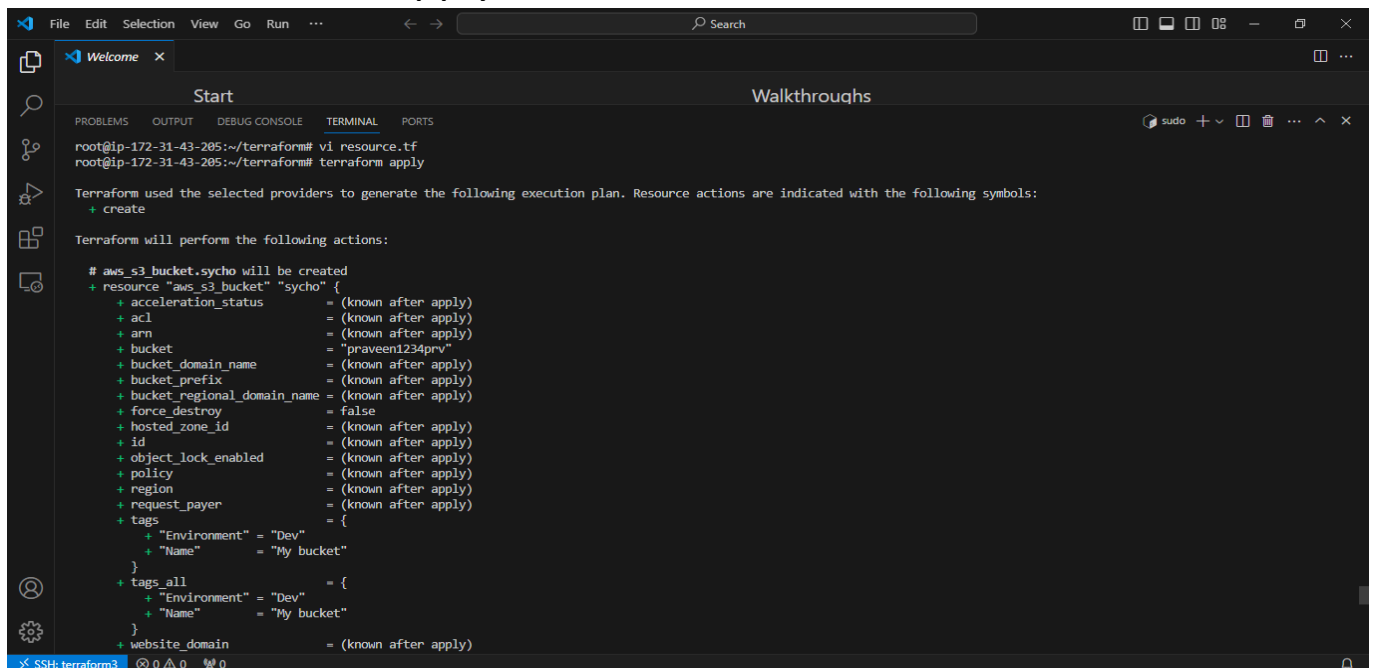
```
File Edit Selection View Go Run ... Search
Welcome x
Start Walkthroughs
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
| (and one more similar warning elsewhere)
Success! The configuration is valid, but there were some validation warnings as shown above.
root@ip-172-31-43-205:~/terraform# terraform plan

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_s3_bucket.ravi1 will be created
+ resource "aws_s3_bucket" "ravi1" {
+   acceleration_status      = (known after apply)
+   acl                      = (known after apply)
+   arn                      = (known after apply)
+   bucket                   = "praveen123"
+   bucket_domain_name       = (known after apply)
+   bucket_prefix            = (known after apply)
+   bucket_regional_domain_name = (known after apply)
+   force_destroy            = false
+   hosted_zone_id           = (known after apply)
+   id                       = (known after apply)
+   object_lock_enabled       = (known after apply)
+   policy                   = (known after apply)
+   region                   = (known after apply)
+   request_payer             = (known after apply)
+   tags                     = {
+     "Environment" = "Dev"
+     "Name"        = "My bucket"
+   }
+   tags_all              = {
+     "Environment" = "Dev"
+   }
}
```

Terraform apply



The screenshot shows a terminal window with the following content:

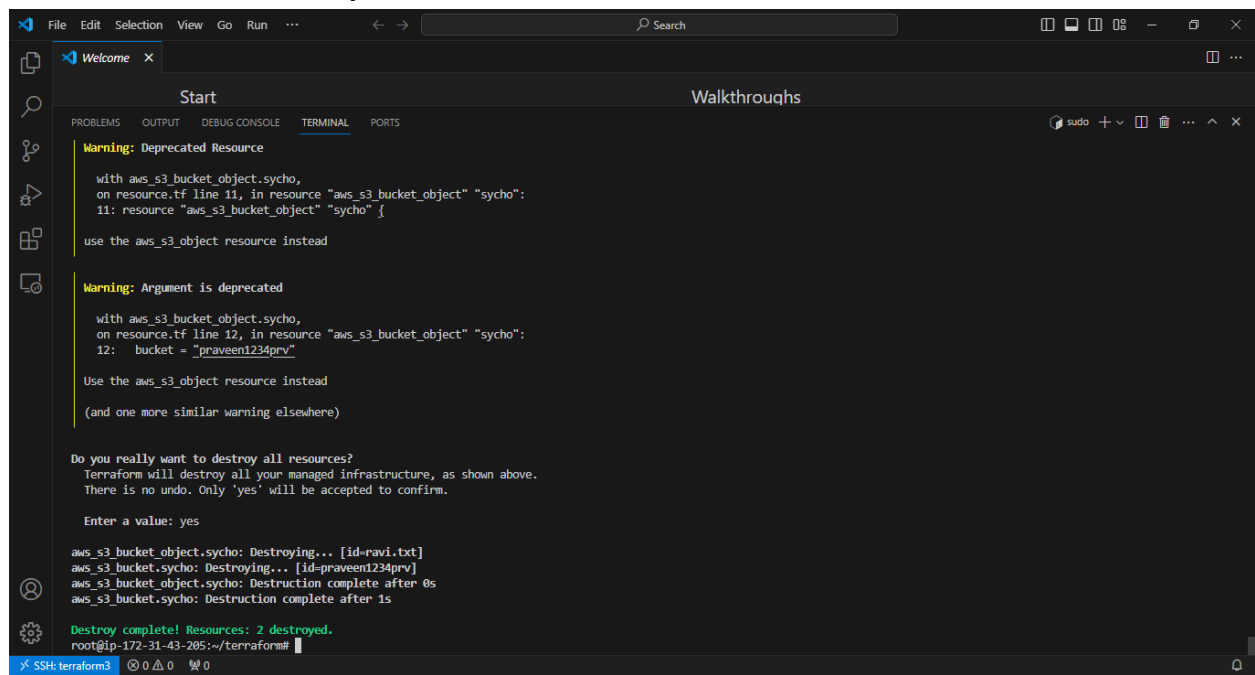
```
File Edit Selection View Go Run ... Search
Welcome x
Start Walkthroughs
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
root@ip-172-31-43-205:~/terraform# vi resource.tf
root@ip-172-31-43-205:~/terraform# terraform apply

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_s3_bucket.sycho will be created
+ resource "aws_s3_bucket" "sycho" {
+   acceleration_status      = (known after apply)
+   acl                      = (known after apply)
+   arn                      = (known after apply)
+   bucket                   = "praveen1234prv"
+   bucket_domain_name       = (known after apply)
+   bucket_prefix            = (known after apply)
+   bucket_regional_domain_name = (known after apply)
+   force_destroy            = false
+   hosted_zone_id           = (known after apply)
+   id                       = (known after apply)
+   object_lock_enabled       = (known after apply)
+   policy                   = (known after apply)
+   region                   = (known after apply)
+   request_payer             = (known after apply)
+   tags                     = {
+     "Environment" = "Dev"
+     "Name"        = "My bucket"
+   }
+   tags_all              = {
+     "Environment" = "Dev"
+     "Name"        = "My bucket"
+   }
+   website_domain        = (known after apply)
}
```

Terraform destroy



The screenshot shows a VS Code terminal window with the following content:

```
File Edit Selection View Go Run ... Search
Welcome x
Start Walkthroughs
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Warning: Deprecated Resource
  with aws_s3_bucket_object.sycho,
  on resource.tf line 11, in resource "aws_s3_bucket_object" "sycho":
  11: resource "aws_s3_bucket_object" "sycho" {
  use the aws_s3_object resource instead

Warning: Argument is deprecated
  with aws_s3_bucket_object.sycho,
  on resource.tf line 12, in resource "aws_s3_bucket_object" "sycho":
  12:   bucket = "praveen1234prv"
  Use the aws_s3_object resource instead
  (and one more similar warning elsewhere)

Do you really want to destroy all resources?
  Terraform will destroy all your managed infrastructure, as shown above.
  There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

aws_s3_bucket_object.sycho: Destroying... [id-ravi.txt]
aws_s3_bucket.sycho: Destroying... [id-praveen1234prv]
aws_s3_bucket_object.sycho: Destruction complete after 0s
aws_s3_bucket.sycho: Destruction complete after 1s

Destroy complete! Resources: 2 destroyed.
root@ip-172-31-43-205:~/terraform#
```

The terminal window is titled "SSH: terraform3" and shows the output of a Terraform destroy command. It includes warnings about deprecated resources and arguments, a confirmation prompt, and the final status of the destroyed resources.