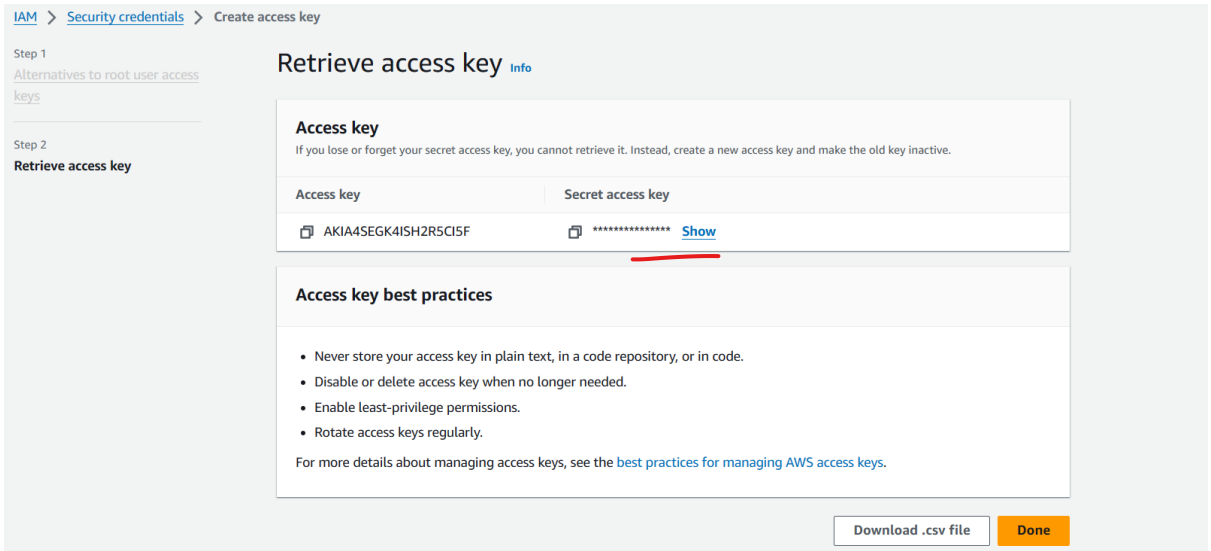
Terraform assignment

```
[ec2-user@ip-10-0-1-131 ~]$ sudo yum-config-manager --add-repo https://rpm.releases.hashicorp.com/AmazonLinux/hashicorp.
repo
Adding repo from: https://rpm.releases.hashicorp.com/AmazonLinux/hashicorp.repo
[ec2-user@ip-10-0-1-131 ~]$ sudo yum -y install terraform
Hashicorp Stable - x86_64                                                    12 MB/s | 1.3 MB     00:00
Dependencies resolved.
================================================================================================================
 Package                 Architecture        Version                          Repository                Size
================================================================================================================
Installing:
 terraform               x86_64              1.7.1-1                          hashicorp                 26 M
Installing dependencies:
 git                     x86_64              2.40.1-1.amzn2023.0.1            amazonlinux               57 k
 git-core                x86_64              2.40.1-1.amzn2023.0.1            amazonlinux              4.3 M
 git-core-doc            noarch              2.40.1-1.amzn2023.0.1            amazonlinux              2.6 M
 perl-Error              noarch              1:0.17029-5.amzn2023.0.2         amazonlinux               41 k
 perl-File-Find          noarch              1.37-477.amzn2023.0.6            amazonlinux               26 k
 perl-Git                noarch              2.40.1-1.amzn2023.0.1            amazonlinux               45 k
 perl-TermReadKey        x86_64              2.38-9.amzn2023.0.2              amazonlinux               36 k
 perl-lib                x86_64              0.65-477.amzn2023.0.6            amazonlinux               15 k

Transaction Summary
================================================================================================================
Install  9 Packages

Total download size: 33 M
Installed size: 114 M
Downloading Packages:
(1/9): git-2.40.1-1.amzn2023.0.1.x86_64.rpm                                  830 kB/s |  57 kB     00:00
```



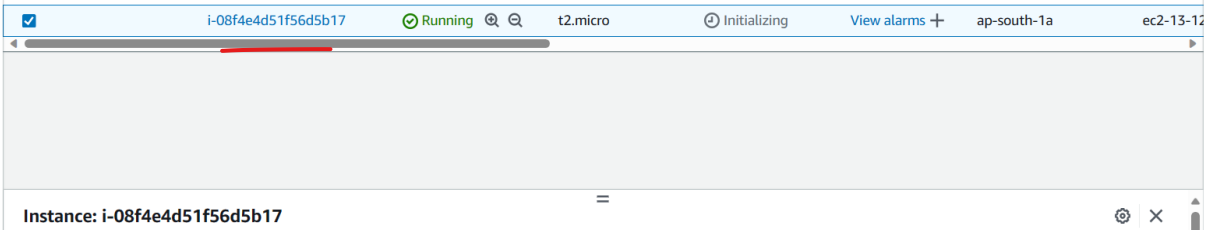

```
Complete!
[ec2-user@ip-10-0-1-131 ~]$ export AWS_ACCESS_KEY_ID = AKIA4SEGK4ISH2R5CI5F
-bash: export: `=': not a valid identifier
[ec2-user@ip-10-0-1-131 ~]$ export AWS_ACCESS_KEY_ID=AKIA4SEGK4ISH2R5CI5F
[ec2-user@ip-10-0-1-131 ~]$ export AWS_SECRET_ACCESS_KEY=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
[ec2-user@ip-10-0-1-131 ~]$ sudo yum install -y aws-cli
Last metadata expiration check: 0:04:48 ago on Sat Jan 27 06:00:08 2024.
Package awscli-2-2.14.5-1.amzn2023.0.1.noarch is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-10-0-1-131 ~]$ aws --version
aws-cli/2.14.5 Python/3.9.16 Linux/6.1.72-96.166.amzn2023.x86_64 source/x86_64.amzn.2023 prompt/off
[ec2-user@ip-10-0-1-131 ~]$
[ec2-user@ip-10-0-1-131 tf_bundle]$
[ec2-user@ip-10-0-1-131 tf_bundle]$ ll
total 16
-rw-rw-r--. 1 ec2-user ec2-user  315 Jan 27 06:28 ec2.tf
-rw-rw-r--. 1 ec2-user ec2-user 1344 Jan 27 06:28 network.tf
-rw-rw-r--. 1 ec2-user ec2-user   44 Jan 27 06:28 provider.tf
-rw-rw-r--. 1 ec2-user ec2-user  561 Jan 27 06:28 vpc.tf
[ec2-user@ip-10-0-1-131 tf_bundle]$
```

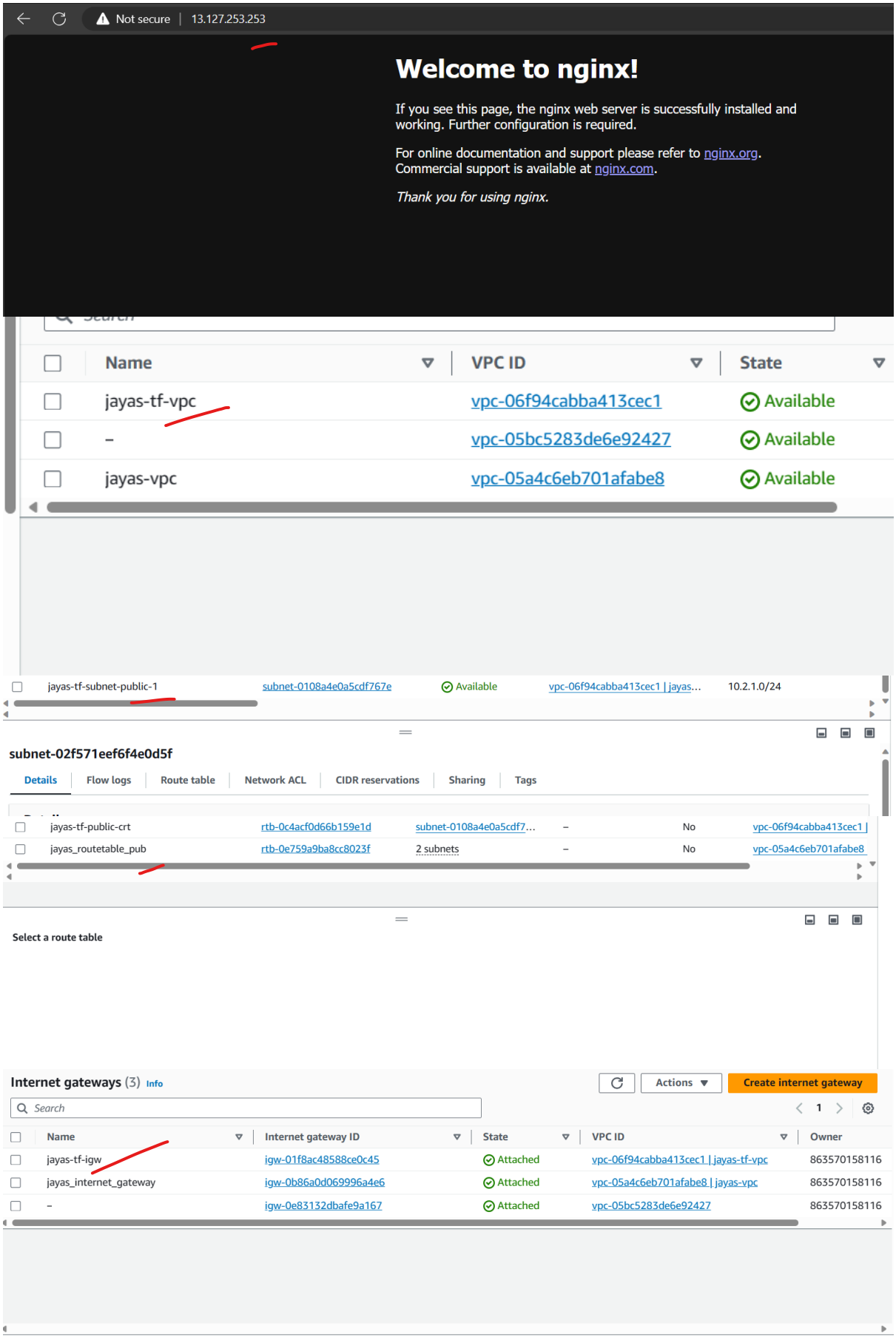
```
[ec2-user@ip-10-0-1-131 tf_bundle]$ terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v5.34.0

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.
[ec2-user@ip-10-0-1-131 tf_bundle]$
```

```
[ec2-user@ip-10-0-1-131 tf_bundle]$ aws configure
AWS Access Key ID [None]: AKIA4SEGW4ISE7GIGH73
AWS Secret Access Key [None]: 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
Default region name [None]: ap-south-1
Default output format [None]:
[ec2-user@ip-10-0-1-131 tf_bundle]$ 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_instance.jayas-tf-web1 will be created
  + resource "aws_instance" "jayas-tf-web1" {
      + ami                                  = "ami-0455d910dab418e8f"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + cpu_core_count                       = (known after apply)
      + cpu_threads_per_core                 = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.micro"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = "ec2_key"

[ec2-user@ip-10-0-1-131 tf_bundle]$ terraform validate
Success! The configuration is valid.

[ec2-user@ip-10-0-1-131 tf_bundle]$ terraform plan -out terraform.out

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_instance.jayas-tf-web1 will be created
  + resource "aws_instance" "jayas-tf-web1" {
      + ami                                  = "ami-0455d910dab418e8f"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + cpu_core_count                       = (known after apply)
      + cpu_threads_per_core                 = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
```

```
[ec2-user@ip-10-0-1-131 tf_bundle]$ 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_instance.jayas-tf-web1 will be created
  + resource "aws_instance" "jayas-tf-web1" {
      + ami                                  = "ami-0455d910dab418e8f"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + cpu_core_count                       = (known after apply)
      + cpu_threads_per_core                 = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)

Plan: 7 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.jayas-tf-vpc: Creating...
aws_vpc.jayas-tf-vpc: Still creating... [10s elapsed]
aws_vpc.jayas-tf-vpc: Creation complete after 11s [id=vpc-06f94cabba413cec1]
aws_security_group.ssh-allowed: Creating...
aws_internet_gateway.jayas-tf-igw: Creating...
aws_subnet.jayas-tf-subnet-public-1: Creating...
aws_internet_gateway.jayas-tf-igw: Creation complete after 1s [id=igw-01f8ac48588ce0c45]
aws_route_table.jayas-tf-public-crt: Creating...
aws_route_table.jayas-tf-public-crt: Creation complete after 0s [id=rtb-0c4acf0d66b159e1d]
aws_security_group.ssh-allowed: Creation complete after 2s [id=sg-0d5af8b5b13c97aed]
aws_subnet.jayas-tf-subnet-public-1: Still creating... [10s elapsed]
aws_subnet.jayas-tf-subnet-public-1: Creation complete after 11s [id=subnet-0108a4e0a5cdf767e]
aws_instance.jayas-tf-web1: Creating...
aws_route_table_association.jayas-tf-crta-public-subnet-1: Creating...
aws_route_table_association.jayas-tf-crta-public-subnet-1: Creation complete after 0s [id=rtbassoc-007568b5f2c024e27]
aws_instance.jayas-tf-web1: Still creating... [10s elapsed]
aws_instance.jayas-tf-web1: Still creating... [20s elapsed]
aws_instance.jayas-tf-web1: Still creating... [30s elapsed]
aws_instance.jayas-tf-web1: Creation complete after 31s [id=i-08f4e4d51f56d5b17]

Apply complete! Resources: 7 added, 0 changed, 0 destroyed.
```

```
[ec2-user@ip-10-0-1-131 tf_bundle]$ terraform apply terraform.out
aws_vpc.jayas-tf-vpc: Creating...
aws_vpc.jayas-tf-vpc: Still creating... [10s elapsed]
aws_vpc.jayas-tf-vpc: Creation complete after 11s [id=vpc-0dc6d0e34749c5081]
aws_internet_gateway.jayas-tf-igw: Creating...
aws_subnet.jayas-tf-subnet-public-1: Creating...
aws_security_group.ssh-allowed: Creating...
aws_internet_gateway.jayas-tf-igw: Creation complete after 1s [id=igw-0f11eac6f0df58522]
aws_route_table.jayas-tf-public-crt: Creating...
aws_route_table.jayas-tf-public-crt: Creation complete after 0s [id=rtb-0780a2f81d1e1c32f]
aws_security_group.ssh-allowed: Creation complete after 2s [id=sg-0ad5eb87d07485f90]
aws_subnet.jayas-tf-subnet-public-1: Still creating... [10s elapsed]
aws_subnet.jayas-tf-subnet-public-1: Creation complete after 11s [id=subnet-0bcff9bccf02fb5ca]
aws_instance.jayas-tf-web1: Creating...
aws_route_table_association.jayas-tf-crta-public-subnet-1: Creating...
aws_route_table_association.jayas-tf-crta-public-subnet-1: Creation complete after 0s [id=rtbassoc-0771af56a1934076f]
aws_instance.jayas-tf-web1: Still creating... [10s elapsed]
aws_instance.jayas-tf-web1: Still creating... [20s elapsed]
aws_instance.jayas-tf-web1: Still creating... [30s elapsed]
aws_instance.jayas-tf-web1: Creation complete after 31s [id=i-09f642cd0a9b026a2]

Apply complete! Resources: 7 added, 0 changed, 0 destroyed.
[ec2-user@ip-10-0-1-131 tf_bundle]$
```




Not secure | 13.127.253.253
Welcome to nginx!
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.
For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.
Thank you for using nginx.
Name
VPC ID
State
jayas-tf-vpc
vpc-06f94cabba413cec1
Available
-
vpc-05bc5283de6e92427
Available
jayas-vpc
vpc-05a4c6eb701afabe8
Available
jayas-tf-subnet-public-1
subnet-0108a4e0a5cdf767e
Available
vpc-06f94cabba413cec1 | jayas...
10.2.1.0/24
subnet-02f571eef6f4e0d5f
Details
Flow logs
Route table
Network ACL
CIDR reservations
Sharing
Tags
jayas-tf-public-crt
rtb-0c4acf0d66b159e1d
subnet-0108a4e0a5cdf7...
No
vpc-06f94cabba413cec1 |
jayas_routetable_pub
rtb-0e759a9ba8cc8023f
2 subnets
No
vpc-05a4c6eb701afabe8
Select a route table
Internet gateways (3) Info
Search
Actions
Create internet gateway
Name
Internet gateway ID
State
VPC ID
Owner
jayas-tf-igw
igw-01f8ac48588ce0c45
Attached
vpc-06f94cabba413cec1 | jayas-tf-vpc
863570158116
jayas_internet_gateway
igw-0b86a0d069996a4e6
Attached
vpc-05a4c6eb701afabe8 | jayas-vpc
863570158116
-
igw-0e83132dbafe9a167
Attached
vpc-05bc5283de6e92427
863570158116