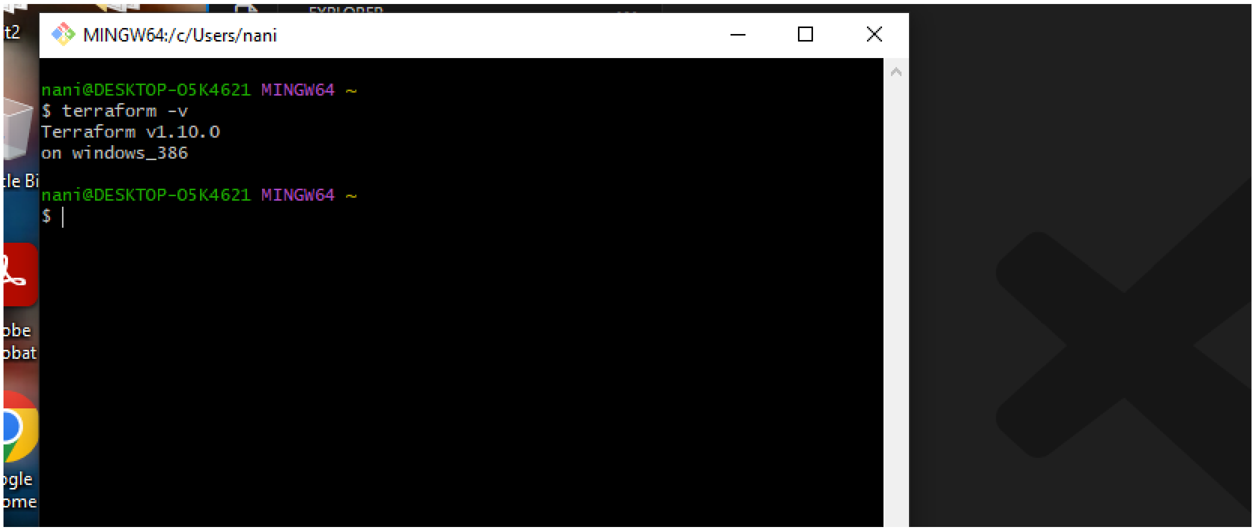
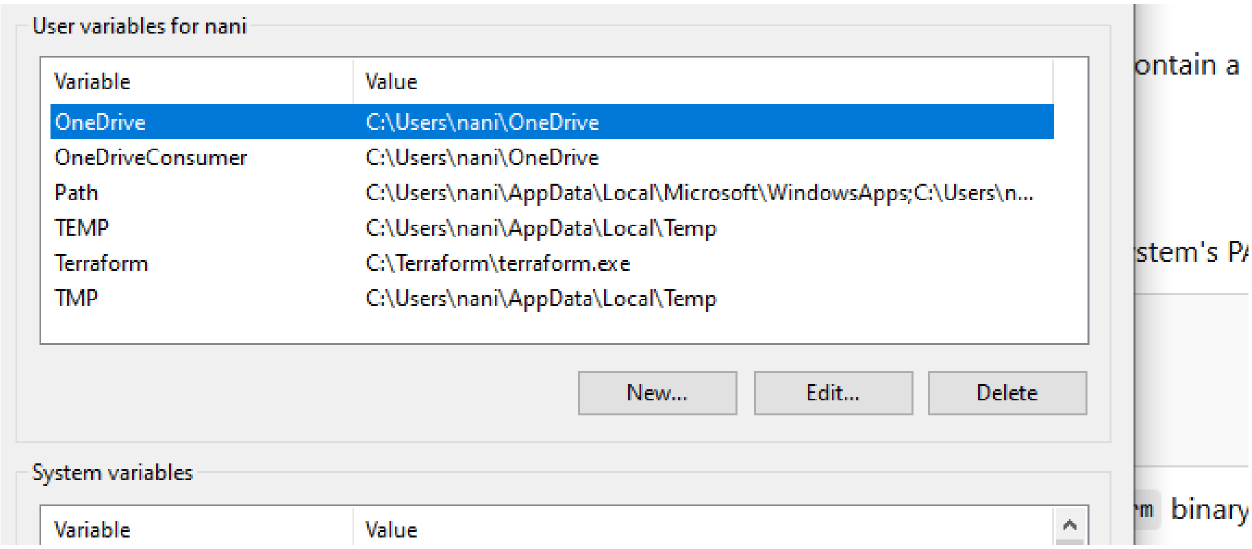
Terraform 1 and 2

1) Install Terraform on your PC



```
nani@DESKTOP-05K4621 MINGW64 ~
$ terraform -v
Terraform v1.10.0
on windows_386

nani@DESKTOP-05K4621 MINGW64 ~
$ |
```

2) Execute all the templates shown in video.



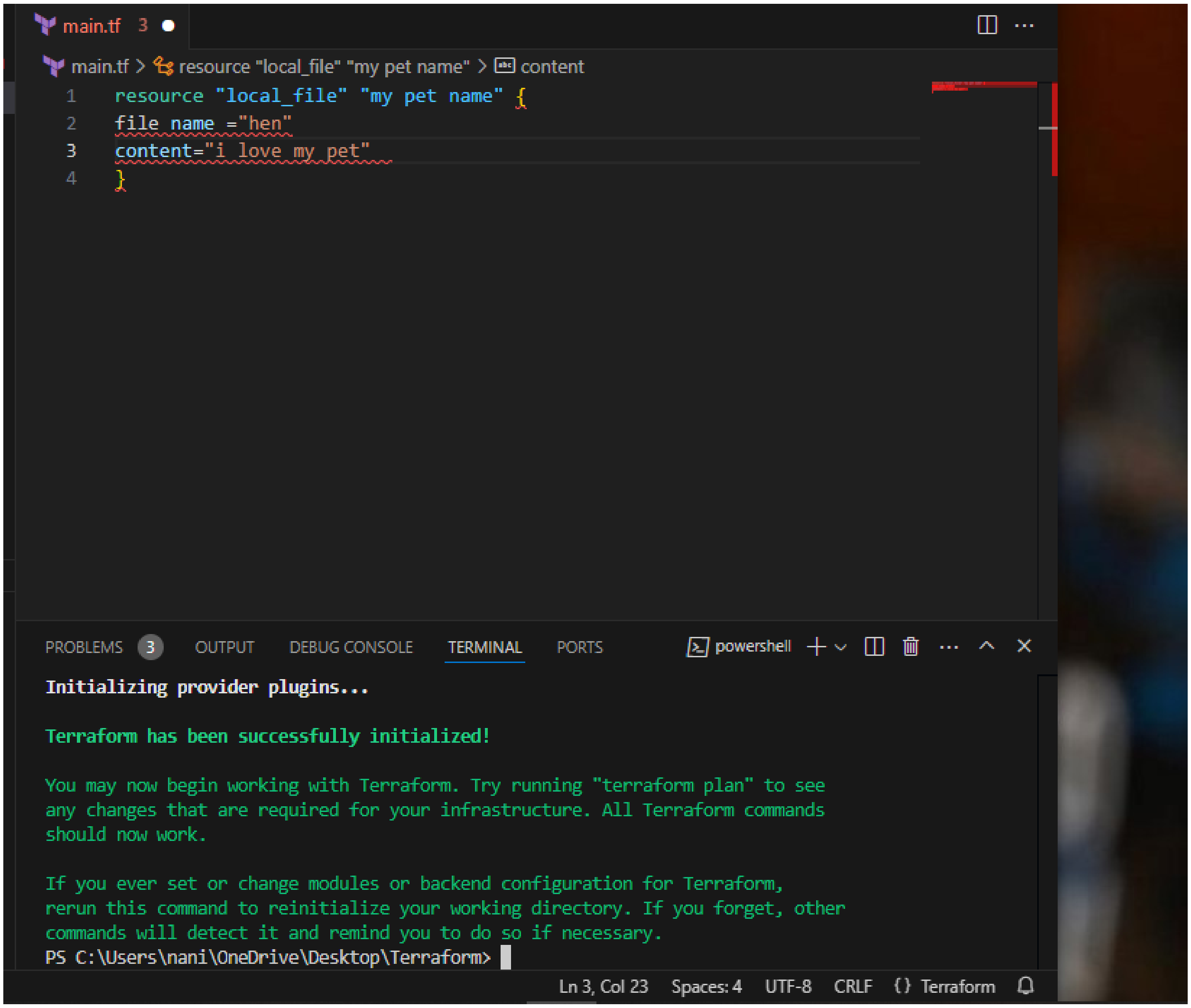
User variables for nani

Variable	Value
OneDrive	C:\Users\nani\OneDrive
OneDriveConsumer	C:\Users\nani\OneDrive
Path	C:\Users\nani\AppData\Local\Microsoft\WindowsApps;C:\Users\n...
TEMP	C:\Users\nani\AppData\Local\Temp
Terraform	C:\Terraform\terraform.exe
TMP	C:\Users\nani\AppData\Local\Temp

System variables

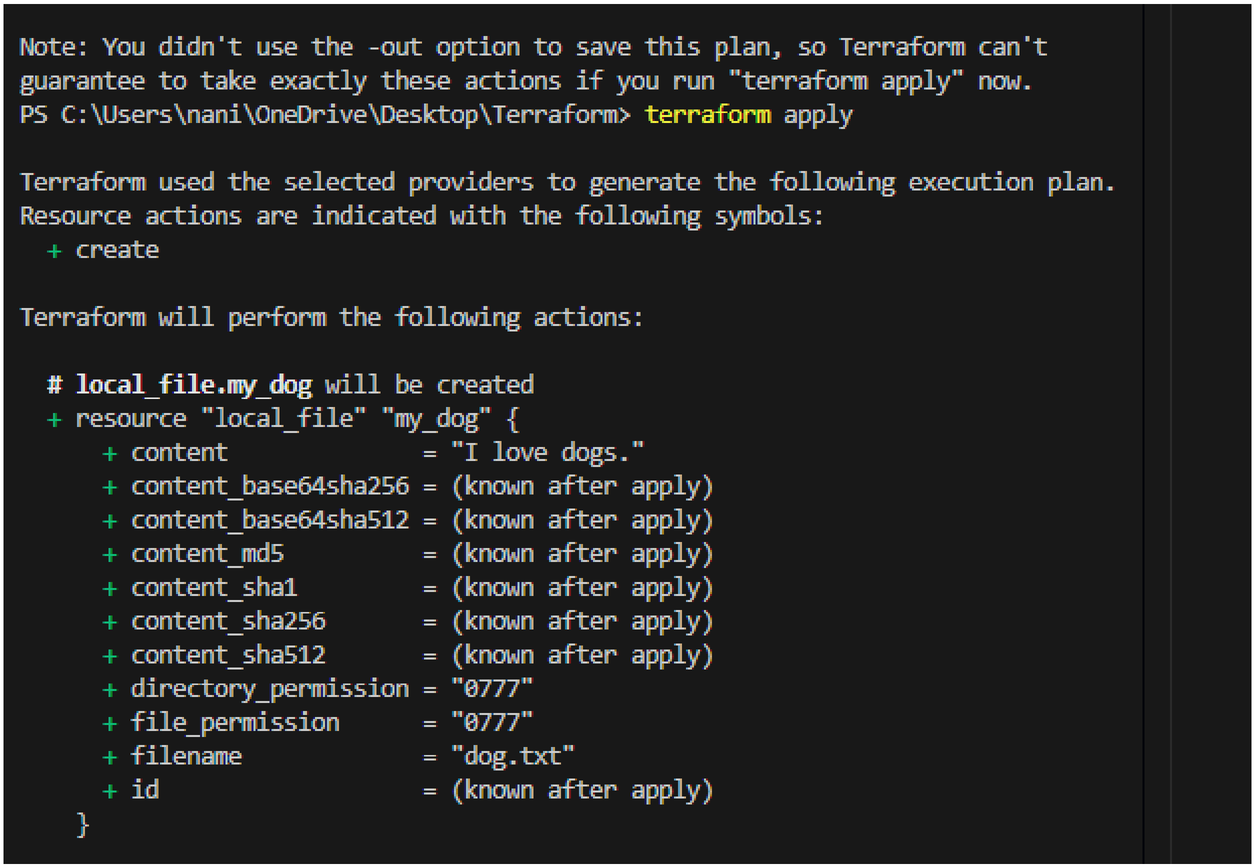
Variable	Value

3) Note down below points, Terraform Init Terraform Plan Terraform Apply Terraform Provider.

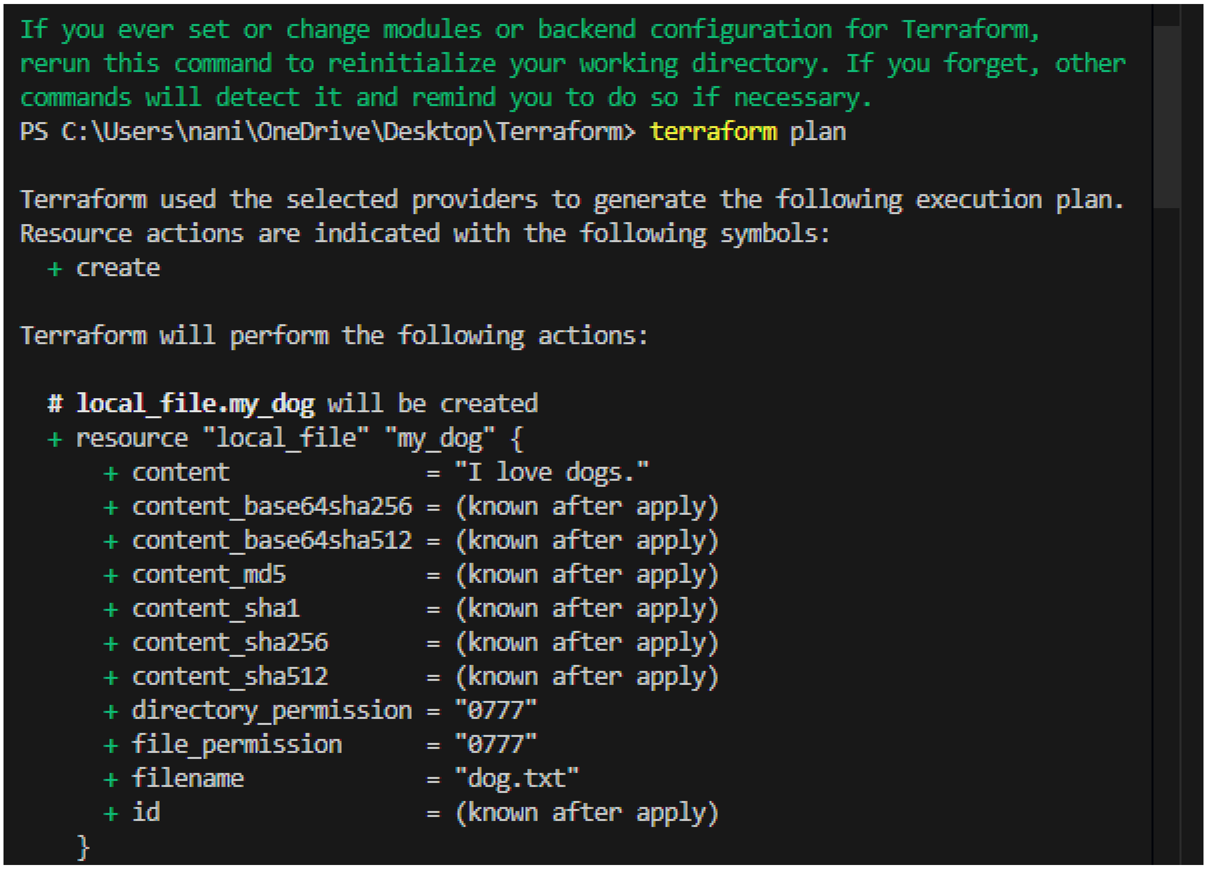


```
resource "local_file" "my pet name" {
file name ="hen"
content="i love my pet"
}
```

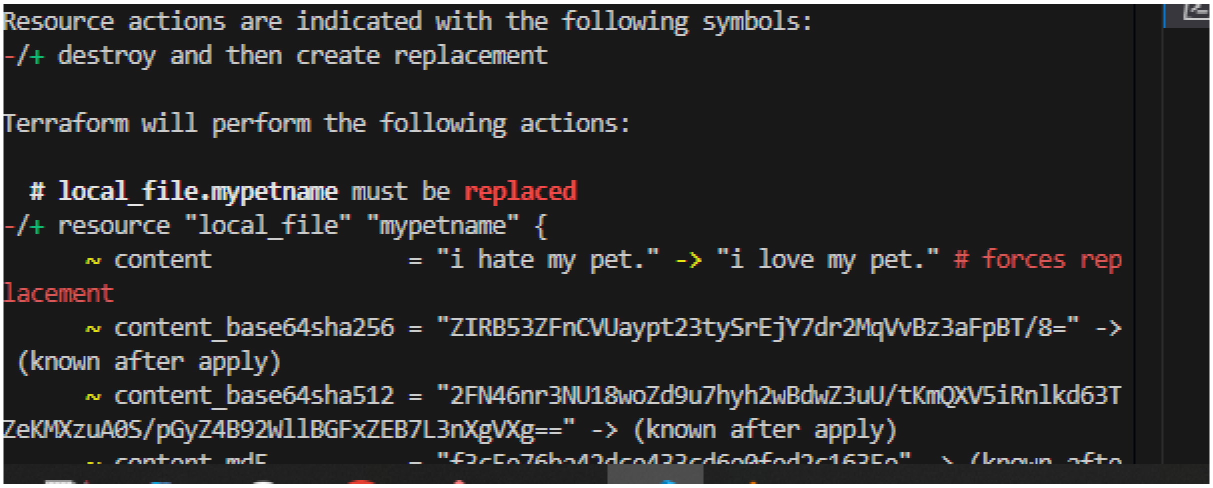
```
Initializing provider plugins...

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.
PS C:\Users\nani\OneDrive\Desktop\Terraform>
```



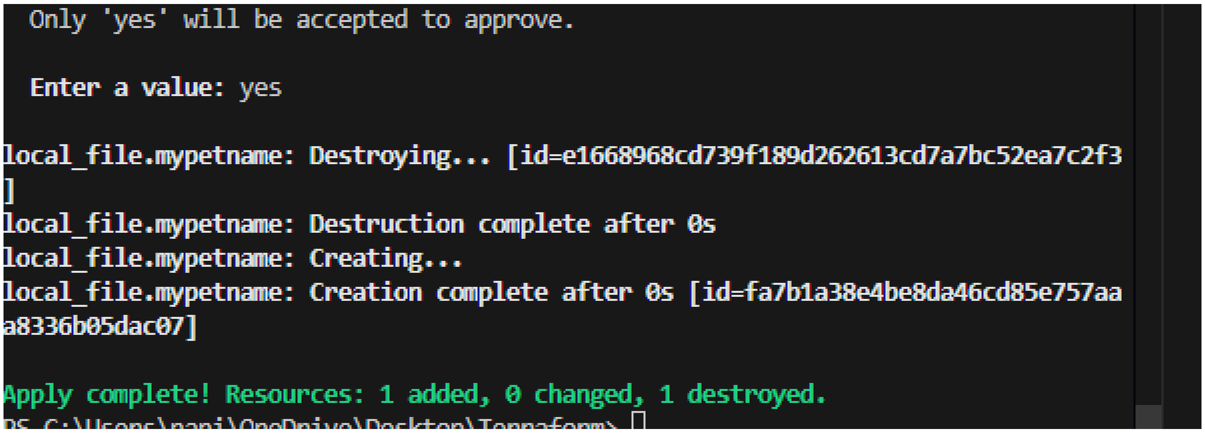
```
Note: You didn't use the -out option to save this plan, so Terraform can't
guarantee to take exactly these actions if you run "terraform apply" now.
PS C:\Users\nani\OneDrive\Desktop\Terraform> terraform apply

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:

  # local_file.my_dog will be created
  + resource "local_file" "my_dog" {
      + content              = "I love dogs."
      + content_base64sha256 = (known after apply)
      + content_base64sha512 = (known after apply)
      + content_md5          = (known after apply)
      + content_sha1         = (known after apply)
      + content_sha256       = (known after apply)
      + content_sha512       = (known after apply)
      + directory_permission = "0777"
      + file_permission      = "0777"
      + filename             = "dog.txt"
      + id                   = (known after apply)
    }
```



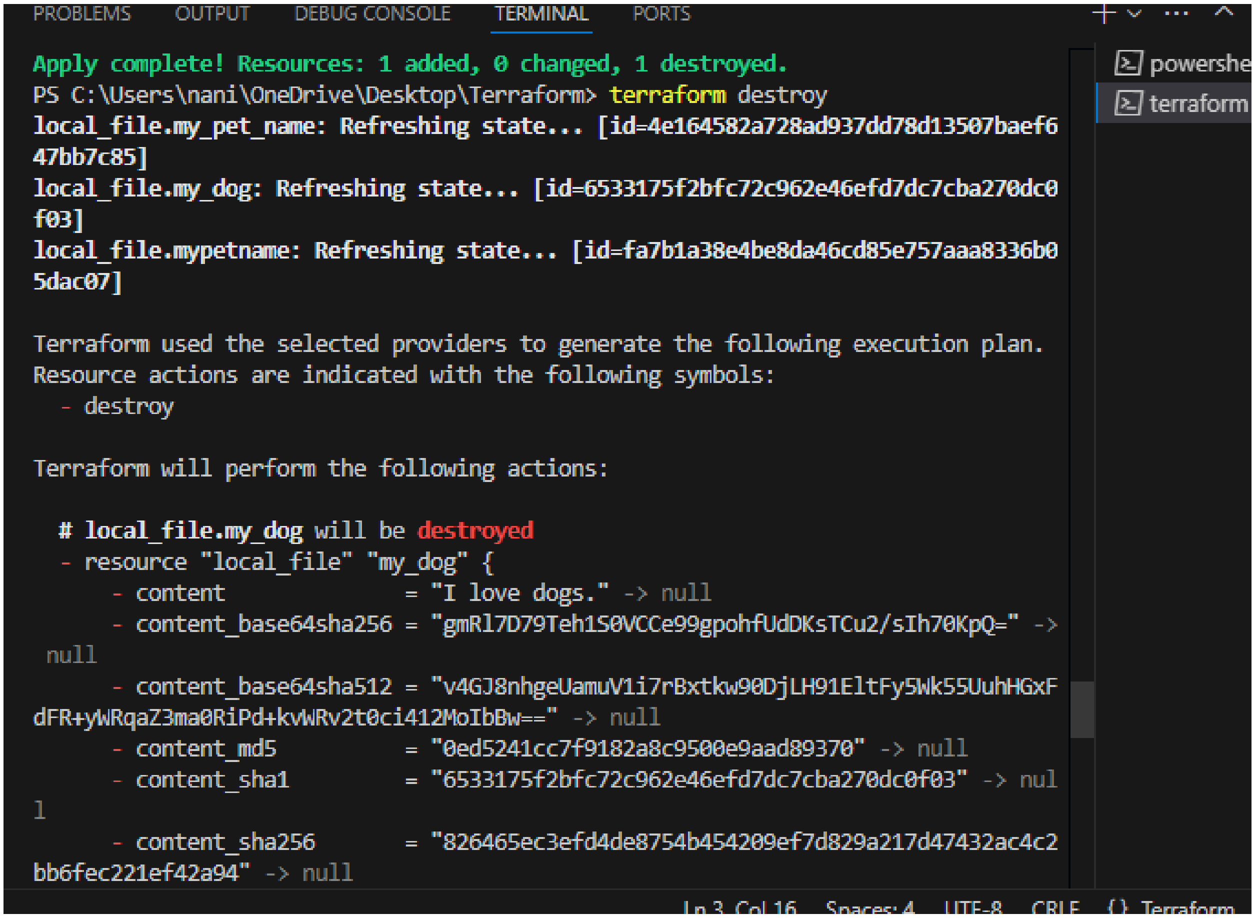
```
If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
PS C:\Users\nani\OneDrive\Desktop\Terraform> terraform plan

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:

  # local_file.my_dog will be created
  + resource "local_file" "my_dog" {
      + content              = "I love dogs."
      + content_base64sha256 = (known after apply)
      + content_base64sha512 = (known after apply)
      + content_md5          = (known after apply)
      + content_sha1         = (known after apply)
      + content_sha256       = (known after apply)
      + content_sha512       = (known after apply)
      + directory_permission = "0777"
      + file_permission      = "0777"
      + filename             = "dog.txt"
      + id                   = (known after apply)
    }
```



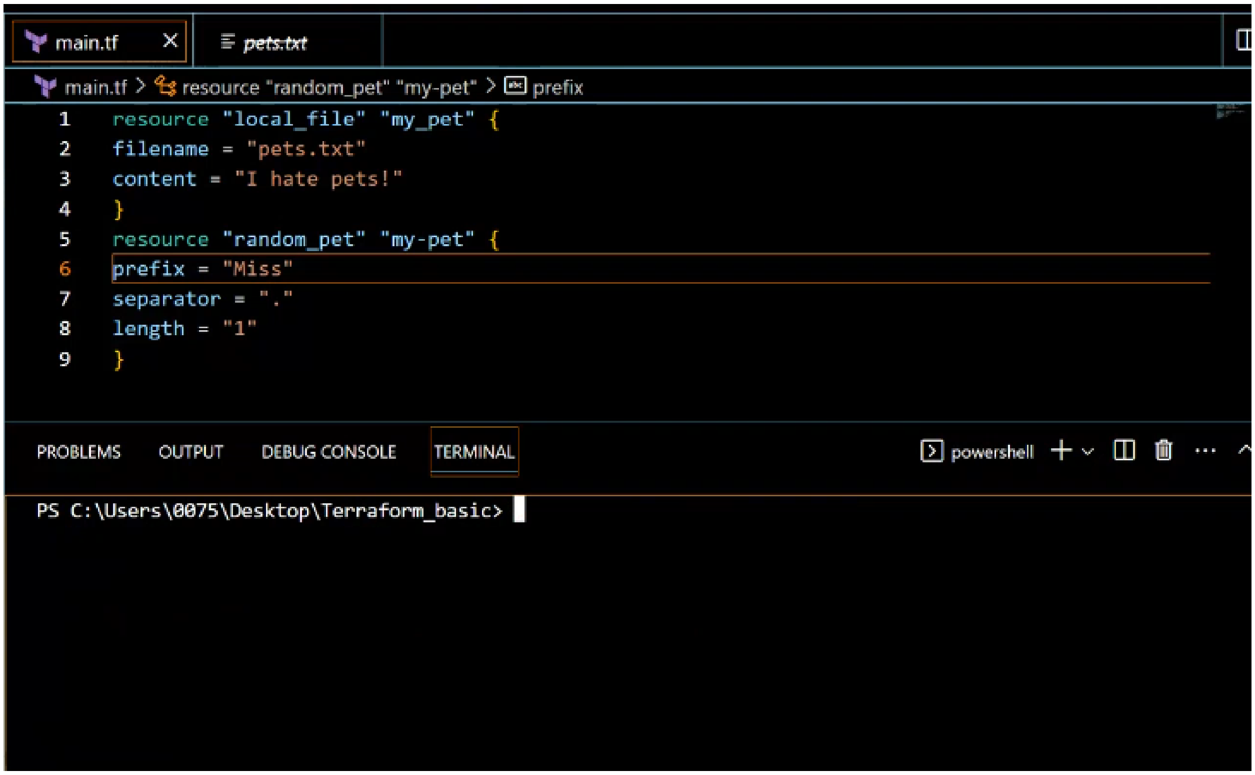
```
Resource actions are indicated with the following symbols:
-/+ destroy and then create replacement

Terraform will perform the following actions:

  # local_file.mypetname must be replaced
-/+ resource "local_file" "mypetname" {
      ~ content              = "i hate my pet." -> "i love my pet." # forces rep
lacement
      ~ content_base64sha256 = "ZIRB53ZFnCVUaypt23tySrEjY7dr2MqVvBz3aFpBT/8=" ->
 (known after apply)
      ~ content_base64sha512 = "2FN46nr3NU18woZd9u7hyh2wBdwZ3uU/tKmQXV5iRnlkd63T
ZeKMXzuA0S/pGyZ4B92WllBGFxZEB7L3nXgVXg==" -> (known after apply)
      ~ content_md5          = "f3c5e76b342dce433cd6e0fed2c1635e" -> (known afte
```



```
  Only 'yes' will be accepted to approve.

  Enter a value: yes

local_file.mypetname: Destroying... [id=e1668968cd739f189d262613cd7a7bc52ea7c2f3
]
local_file.mypetname: Destruction complete after 0s
local_file.mypetname: Creating...
local_file.mypetname: Creation complete after 0s [id=fa7b1a38e4be8da46cd85e757aa
a8336b05dac07]

Apply complete! Resources: 1 added, 0 changed, 1 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform> 
```

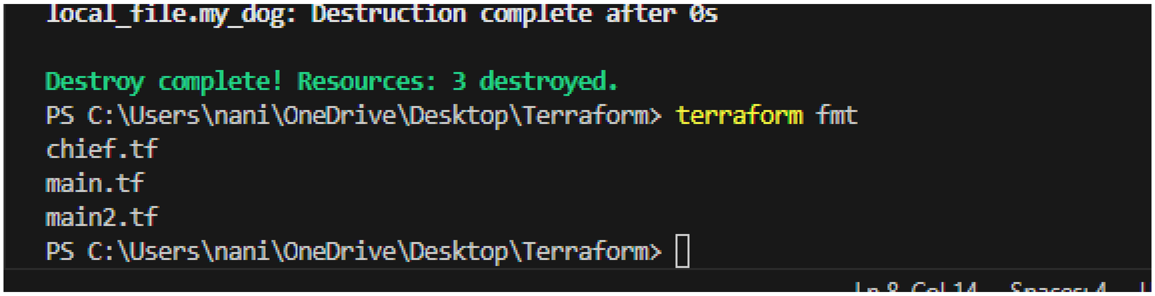


```
Apply complete! Resources: 1 added, 0 changed, 1 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform> terraform destroy
local_file.my_pet_name: Refreshing state... [id=4e164582a728ad937dd78d13507baef6
47bb7c85]
local_file.my_dog: Refreshing state... [id=6533175f2bfc72c962e46efd7dc7cba270dc0
f03]
local_file.mypetname: Refreshing state... [id=fa7b1a38e4be8da46cd85e757aaa8336b0
5dac07]

Terraform used the selected providers to generate the following execution plan.
Resource actions are indicated with the following symbols:
  - destroy

Terraform will perform the following actions:

  # local_file.my_dog will be destroyed
  - resource "local_file" "my_dog" {
      - content              = "I love dogs." -> null
      - content_base64sha256 = "gmRl7D79Teh1S0VCCe99gpohfUdDKsTCu2/sIh70KpQ=" ->
 null
      - content_base64sha512 = "v4GJ8nhgeUamuV1i7rBxtkw90DjLH91EltFy5Wk55UuhHGxF
dFR+yWRqaZ3ma0RiPd+kvWRv2t0ci412MoIbBw==" -> null
      - content_md5          = "0ed5241cc7f9182a8c9500e9aad89370" -> null
      - content_sha1         = "6533175f2bfc72c962e46efd7dc7cba270dc0f03" -> nul
l
      - content_sha256       = "826465ec3efd4de8754b454209ef7d829a217d47432ac4c2
bb6fec221ef42a94" -> null
```



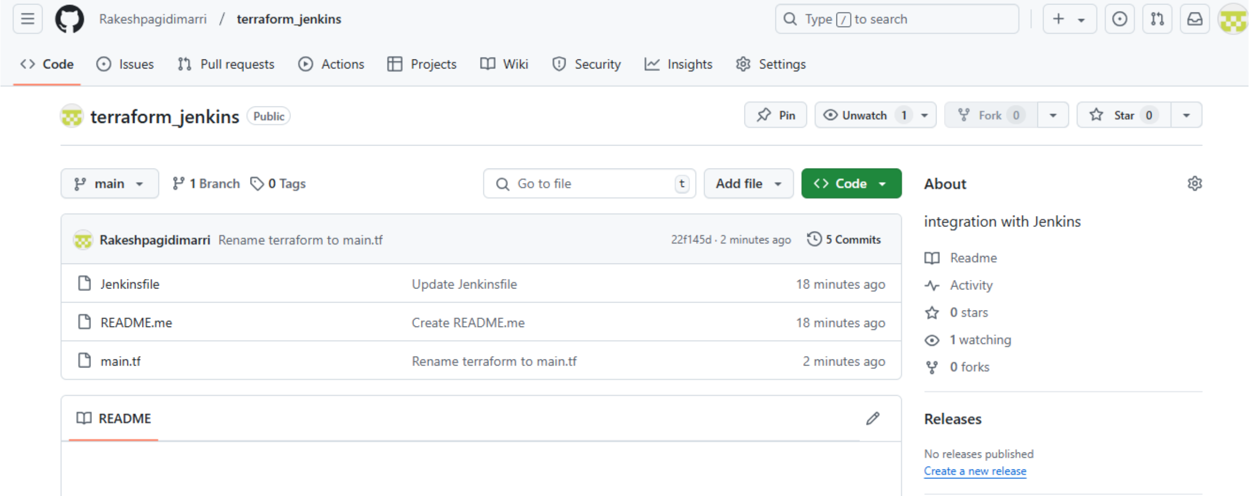
```
resource "local_file" "my_pet" {
filename = "pets.txt"
content = "I hate pets!"
}
resource "random_pet" "my-pet" {
prefix = "Miss"
separator = "."
length = "1"
}
```

```
PS C:\Users\0075\Desktop\Terraform_basic>
```



```
local_file.my_dog: Destruction complete after 0s

Destroy complete! Resources: 3 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform> terraform fmt
chief.tf
main.tf
main2.tf
PS C:\Users\nani\OneDrive\Desktop\Terraform> 
```

4) Integrate a sample Terraform template in jenkins.



Rakeshpagidimarri Rename terraform to main.tf 22f145d · 2 minutes ago 5 Commits

Jenkinsfile	Update Jenkinsfile	18 minutes ago
README.me	Create README.me	18 minutes ago
main.tf	Rename terraform to main.tf	2 minutes ago

README

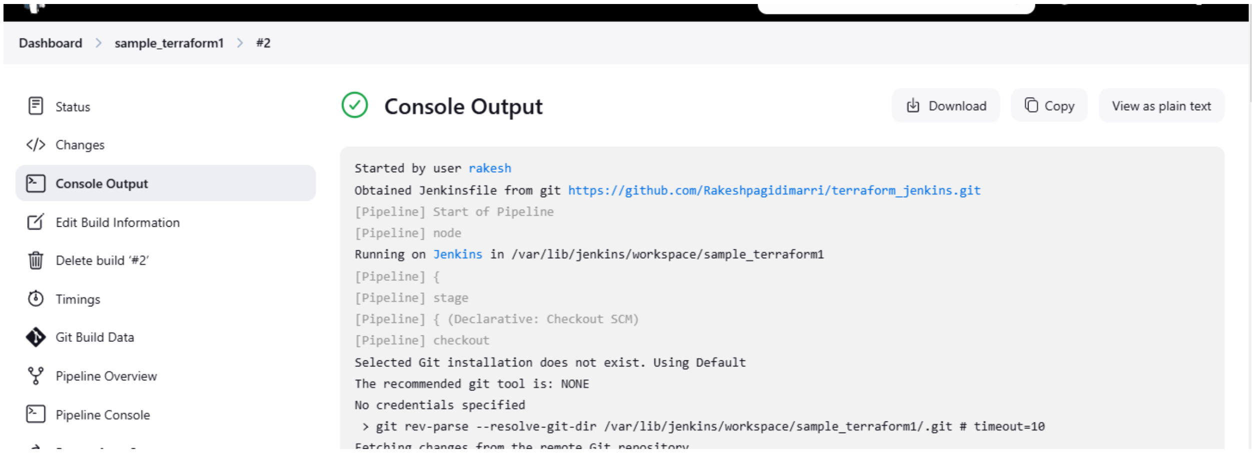
About

integration with Jenkins

Readme
Activity
0 stars
1 watching
0 forks

Releases

No releases published
Create a new release

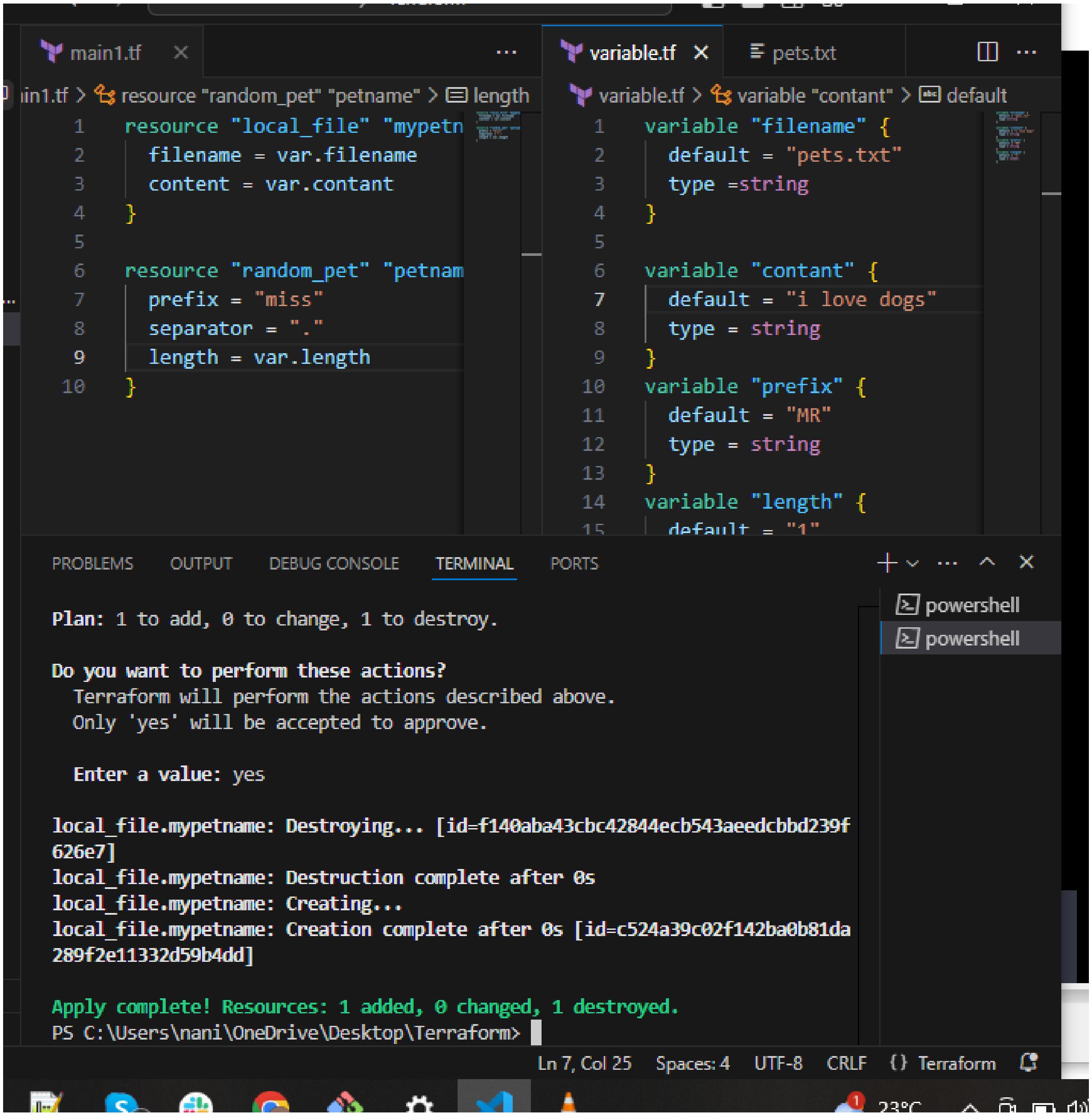


Console Output

```
Started by user rakesh
Obtained Jenkinsfile from git https://github.com/Rakeshpagidimarri/terraform_jenkins.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/sample_terraform1
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
 > git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/sample_terraform1/.git # timeout=10
Fetching changes from the remote Git repository
```

5) Watch the terraform-02 video.

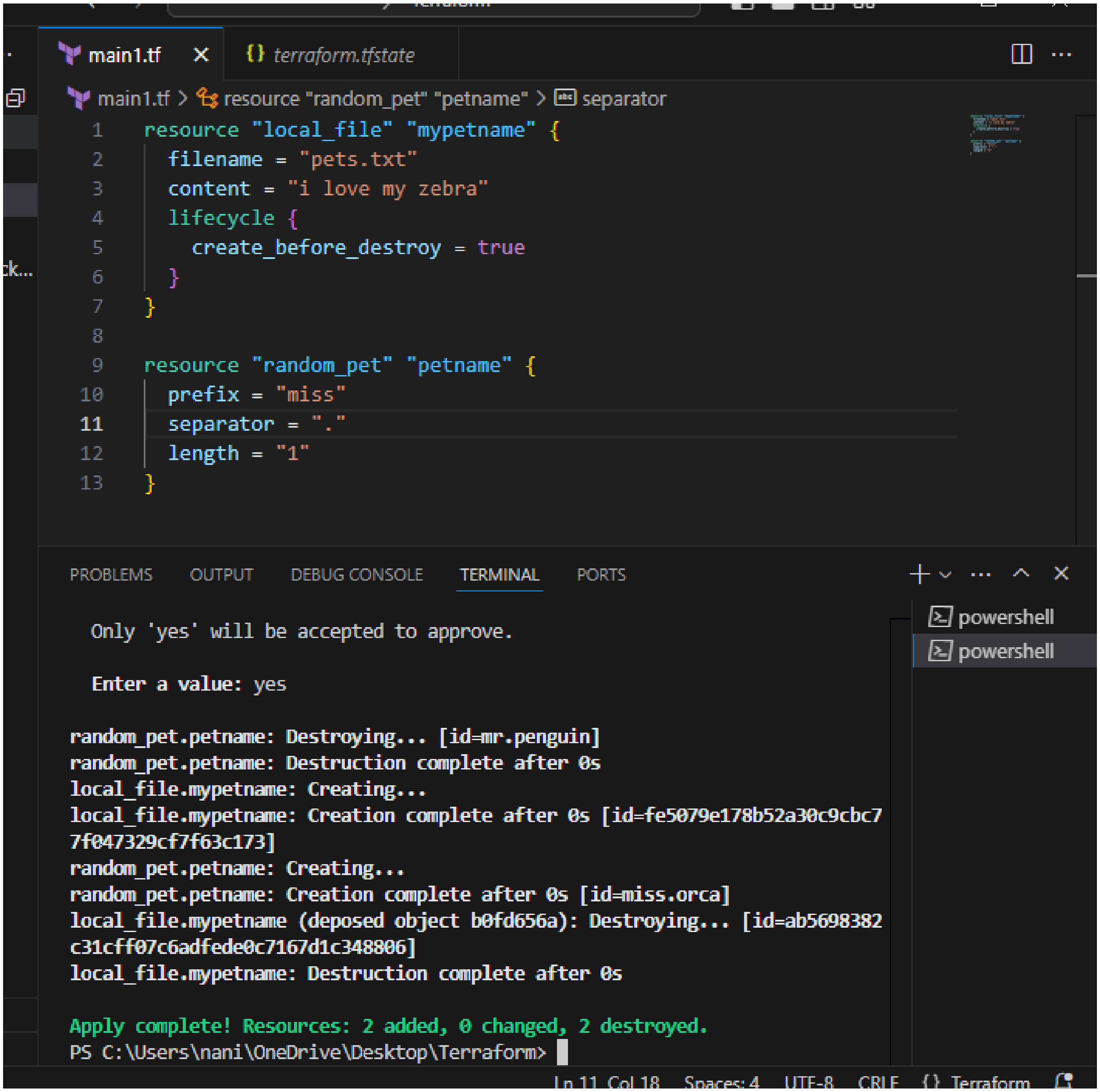
6) Execute all the templates shown in video.



```
resource "local_file" "mypetn
  filename = var.filename
  content = var.contant
}

resource "random_pet" "petnam
  prefix = "miss"
  separator = "."
  length = var.length
}
```

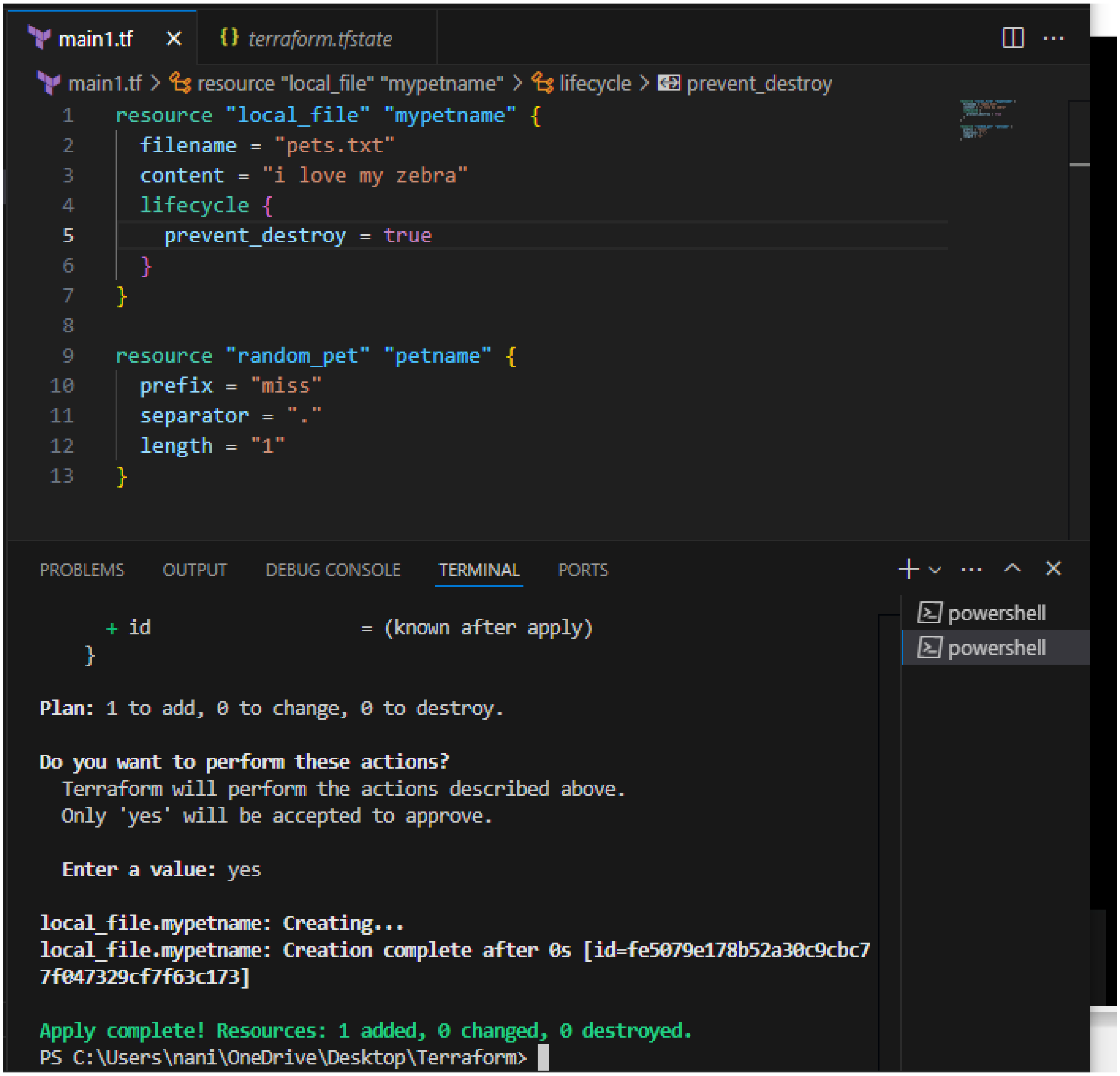
```
variable "filename" {
  default = "pets.txt"
  type =string
}

variable "contant" {
  default = "i love dogs"
  type = string
}
variable "prefix" {
  default = "MR"
  type = string
}
variable "length" {
  default = "1"
```

```
Plan: 1 to add, 0 to change, 1 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

local_file.mypetname: Destroying... [id=f140aba43cbc42844ecb543aeedcbbd239f
626e7]
local_file.mypetname: Destruction complete after 0s
local_file.mypetname: Creating...
local_file.mypetname: Creation complete after 0s [id=c524a39c02f142ba0b81da
289f2e11332d59b4dd]

Apply complete! Resources: 1 added, 0 changed, 1 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform>
```



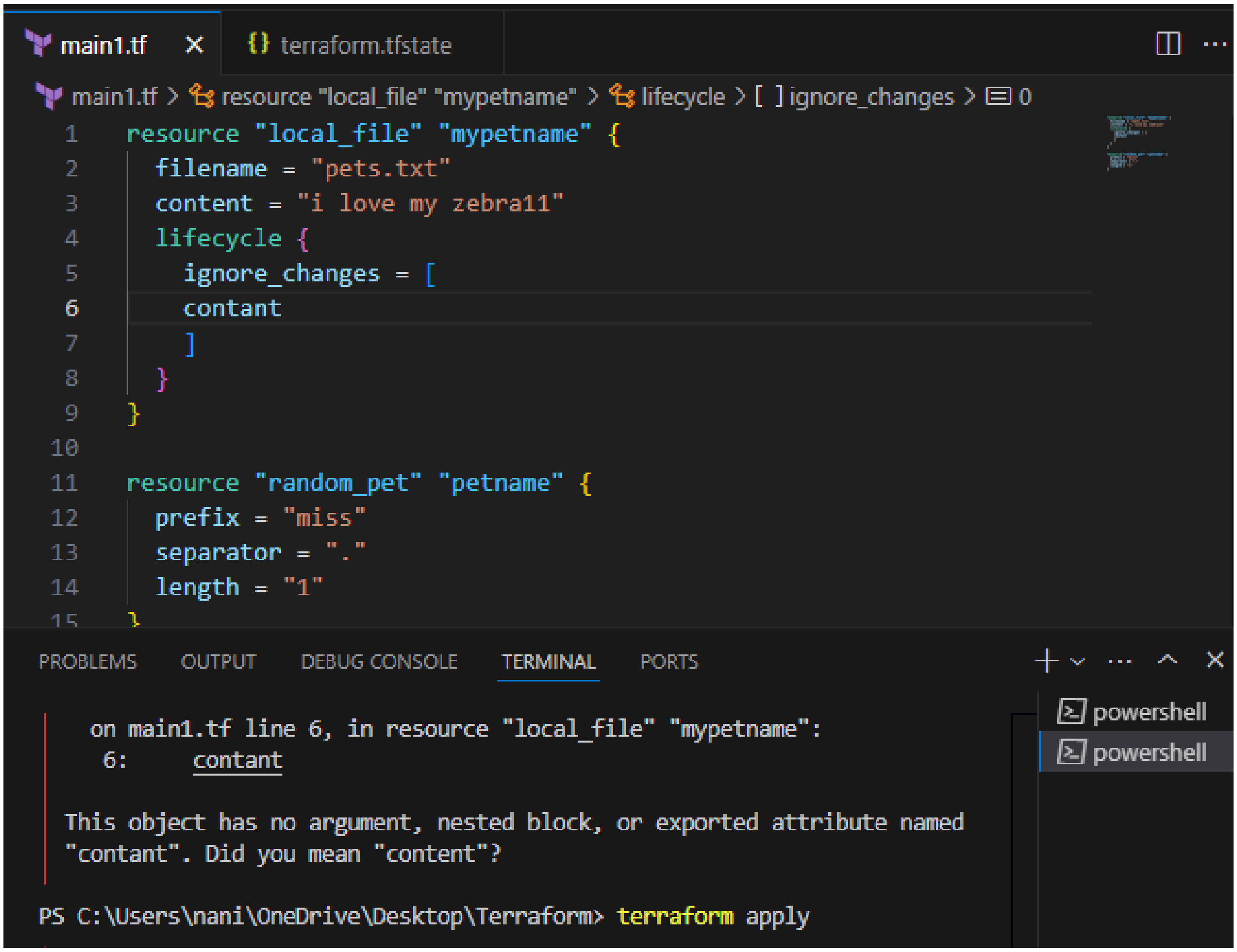
```
resource "local_file" "mypetname" {
  filename = "pets.txt"
  content = "i love my zebra"
  lifecycle {
    create_before_destroy = true
  }
}

resource "random_pet" "petname" {
  prefix = "miss"
  separator = "."
  length = "1"
}
```

```
  Only 'yes' will be accepted to approve.

  Enter a value: yes

random_pet.petname: Destroying... [id=mr.penguin]
random_pet.petname: Destruction complete after 0s
local_file.mypetname: Creating...
local_file.mypetname: Creation complete after 0s [id=fe5079e178b52a30c9cbc7
7f047329cf7f63c173]
random_pet.petname: Creating...
random_pet.petname: Creation complete after 0s [id=miss.orca]
local_file.mypetname (deposed object b0fd656a): Destroying... [id=ab5698382
c31cff07c6adfede0c7167d1c348806]
local_file.mypetname: Destruction complete after 0s

Apply complete! Resources: 2 added, 0 changed, 2 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform>
```



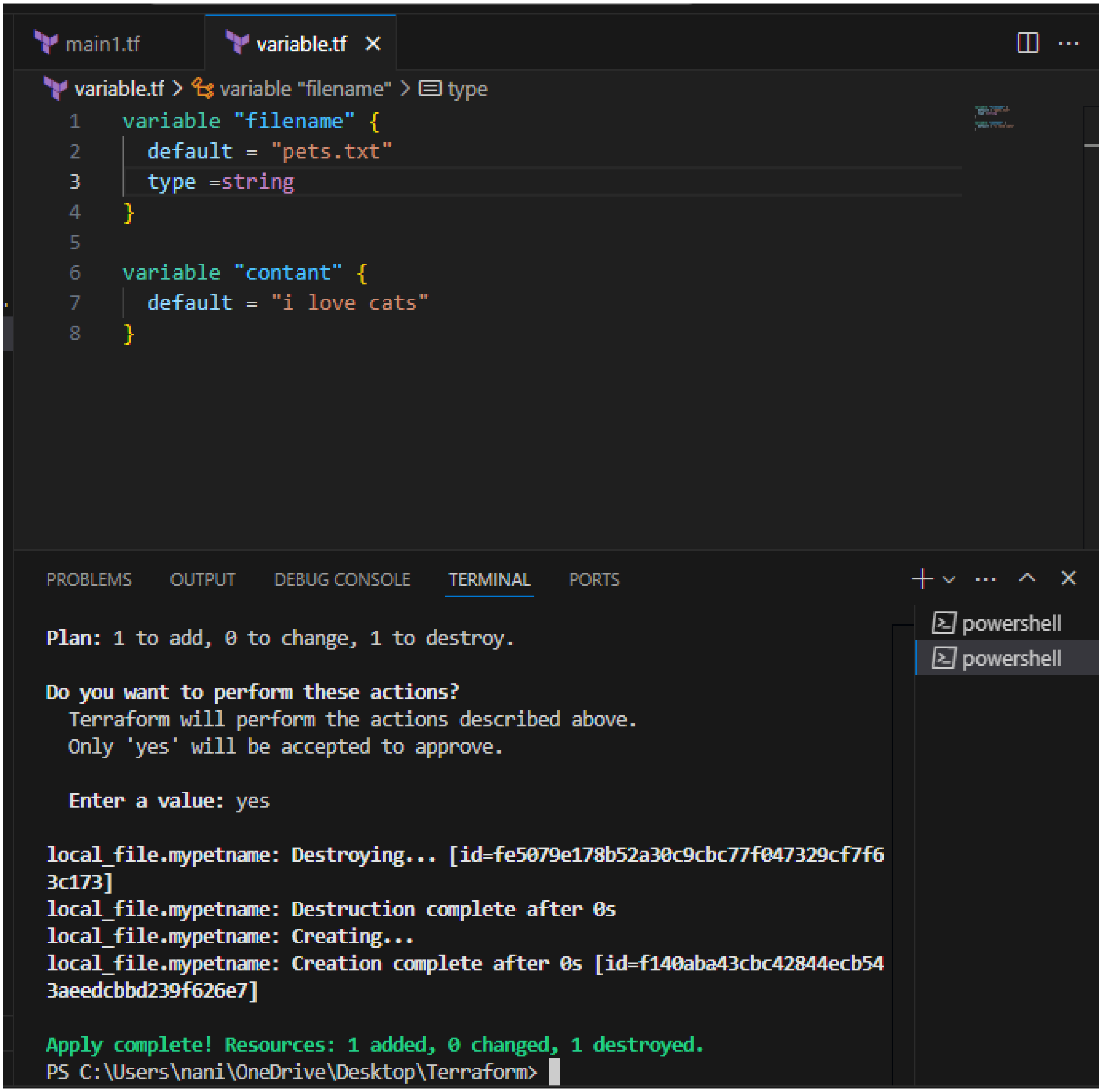
```
resource "local_file" "mypetname" {
  filename = "pets.txt"
  content = "i love my zebra"
  lifecycle {
    prevent_destroy = true
  }
}

resource "random_pet" "petname" {
  prefix = "miss"
  separator = "."
  length = "1"
}
```

```
      + id                  = (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

local_file.mypetname: Creating...
local_file.mypetname: Creation complete after 0s [id=fe5079e178b52a30c9cbc7
7f047329cf7f63c173]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform>
```



```
 1  resource "local_file" "mypetname" {
 2    filename = "pets.txt"
 3    content = "i love my zebra11"
 4    lifecycle {
 5      ignore_changes = [
 6      contant
 7      ]
 8    }
 9  }
10
11  resource "random_pet" "petname" {
12    prefix = "miss"
13    separator = "."
14    length = "1"
15  }
```

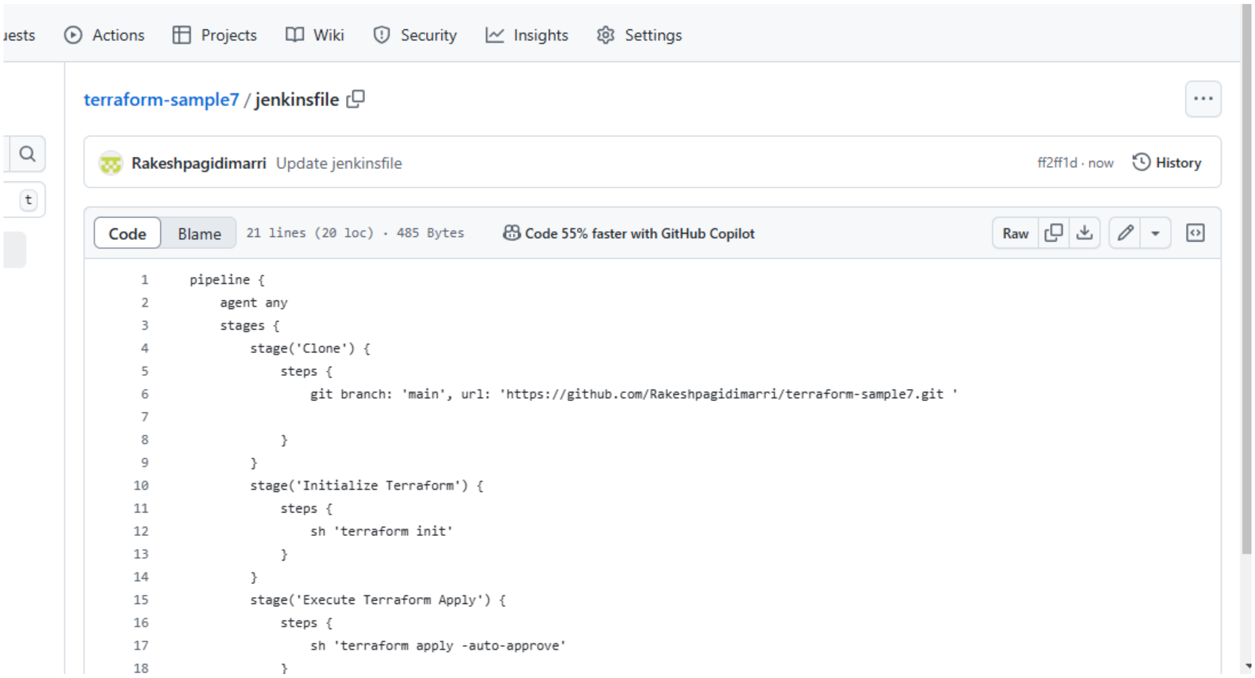
```
    on main1.tf line 6, in resource "local_file" "mypetname":
     6:      contant

  This object has no argument, nested block, or exported attribute named
  "contant". Did you mean "content"?

PS C:\Users\nani\OneDrive\Desktop\Terraform> terraform apply
```



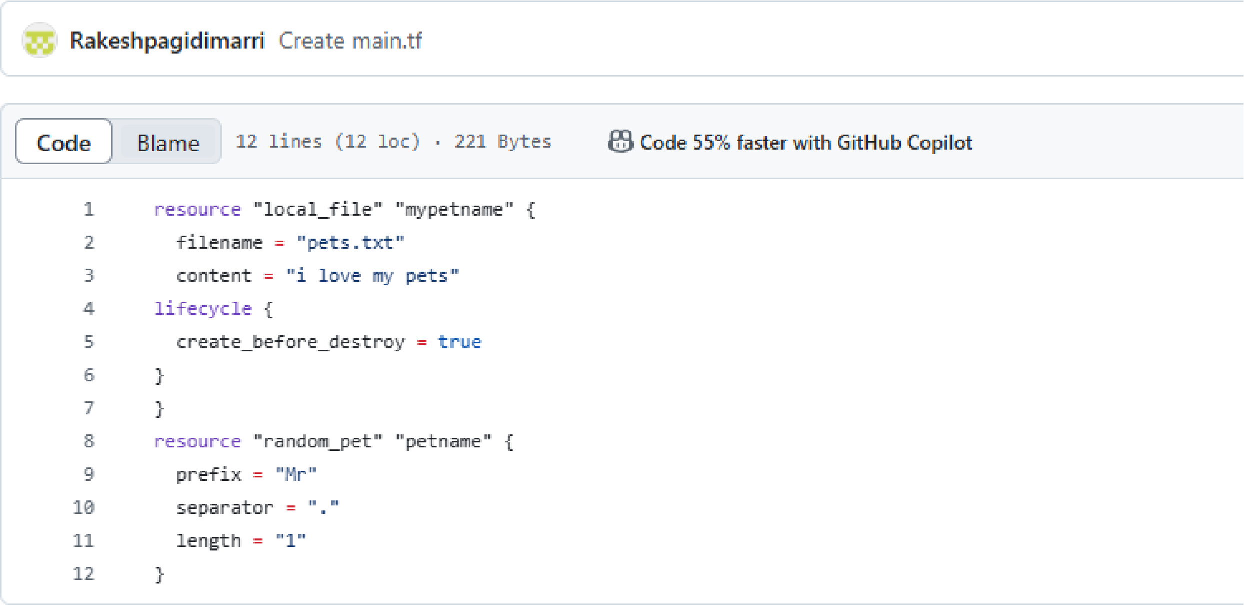
```
variable "filename" {
  default = "pets.txt"
  type =string
}

variable "contant" {
  default = "i love cats"
}
```

```
Plan: 1 to add, 0 to change, 1 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

local_file.mypetname: Destroying... [id=fe5079e178b52a30c9cbc77f047329cf7f6
3c173]
local_file.mypetname: Destruction complete after 0s
local_file.mypetname: Creating...
local_file.mypetname: Creation complete after 0s [id=f140aba43cbc42844ecb54
3aeedcbbd239f626e7]

Apply complete! Resources: 1 added, 0 changed, 1 destroyed.
PS C:\Users\nani\OneDrive\Desktop\Terraform>
```

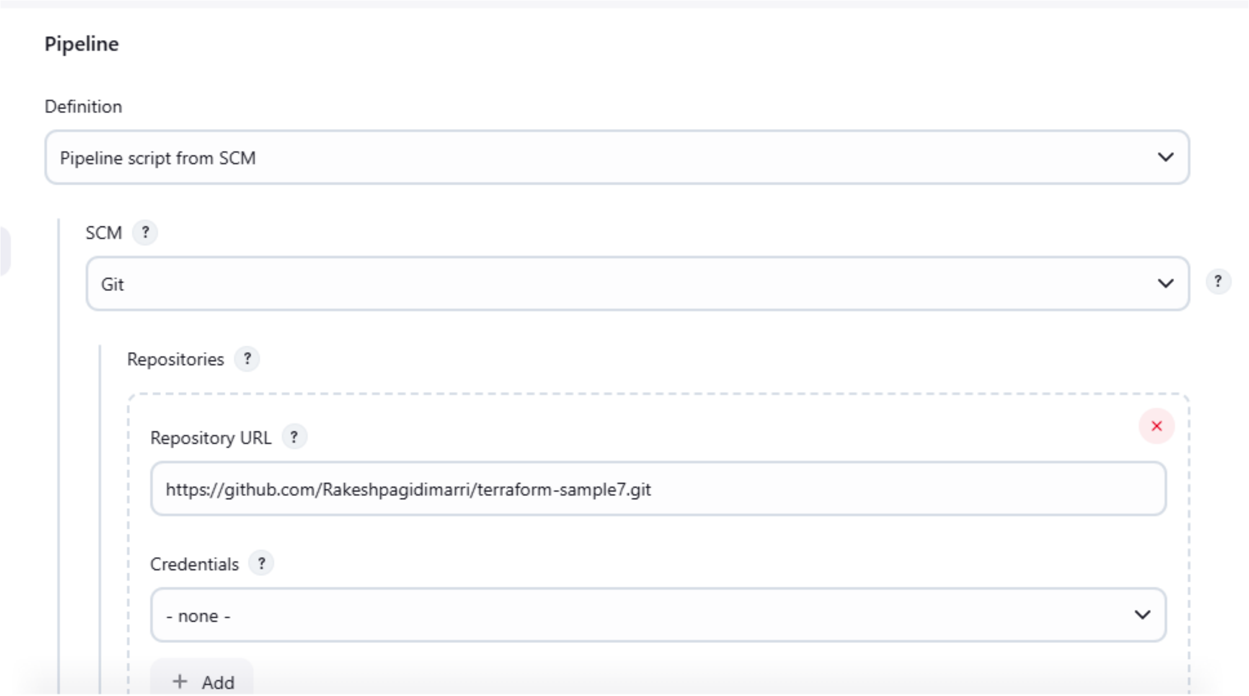
7) Integrate terraform in jenkins using Terraform plugin.


uests
Actions
Projects
Wiki
Security
Insights
Settings
terraform-sample7 / jenkinsfile
Rakeshpagidimarri Update jenkinsfile
ff2ff1d · now
History
Code
Blame
21 lines (20 loc) · 485 Bytes
Code 55% faster with GitHub Copilot
Raw

```
pipeline {
    agent any
    stages {
        stage('Clone') {
            steps {
                git branch: 'main', url: 'https://github.com/Rakeshpagidimarri/terraform-sample7.git '

            }
        }
        stage('Initialize Terraform') {
            steps {
                sh 'terraform init'
            }
        }
        stage('Execute Terraform Apply') {
            steps {
                sh 'terraform apply -auto-approve'
            }
```


Rakeshpagidimarri Create main.tf
Code
Blame
12 lines (12 loc) · 221 Bytes
Code 55% faster with GitHub Copilot

```
resource "local_file" "mypetname" {
  filename = "pets.txt"
  content = "i love my pets"
lifecycle {
  create_before_destroy = true
}
}
resource "random_pet" "petname" {
  prefix = "Mr"
  separator = "."
  length = "1"
}
```



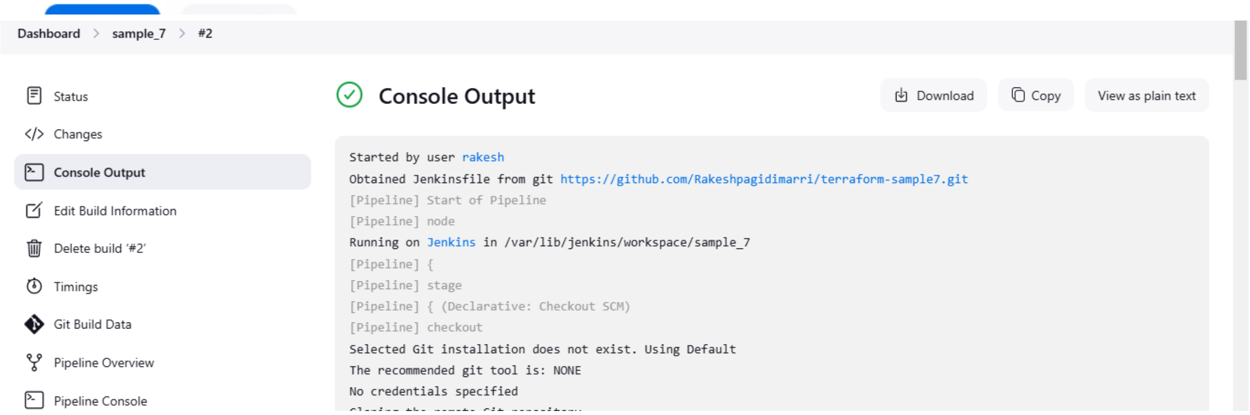
Definition: Pipeline script from SCM

SCM: Git

Repositories

Repository URL: https://github.com/Rakeshpagidimarri/terraform-sample7.git

Credentials: - none -



Console Output

```
Started by user rakesh
Obtained Jenkinsfile from git https://github.com/Rakeshpagidimarri/terraform-sample7.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/sample_7
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
```