

## TASKS ON TERRAFORM

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❖ **BATCH:** 11

❖ **NO.OF TASKS:** 1

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### **Task 1. Create single .tf file with three resources in it**

We need to create **a .tf files, with a three resources in it**, here is a clear structure and example content for each file, using the [local\_file resource from the local provider]

#### Creating file

We create a file named main1.tf using **vi file.tf**

Enter the contents in **file.tf** as follows and save it using **esc:wq**

```
resource "local_file" "filecreation1" {
```

```
    filename = "file_one.txt"
```

```
    content = "This is the content of file one."
```

```
}
```

```
resource "local_file" "filecreation2" {
```

```
    filename = "file_two.txt"
```

```
    content = "This is the content of file two."
```

```
}
```

```
resource "local_file" "filecreation3" {
```

```
    filename = "file_three.txt"
```

```
    content = "This is the content of file three."
```

```
}
```

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## Initialize Terraform using command

## terraform init

Check the contents using **tree -a**

Run the command **terraform validate**

We need to run following command

## terraform plan

- Think of it as a **preview** or **dry run**.
- It shows:
  - What Terraform wants to create, change, or delete.
- **No changes are made** to our real environment when running plan.
- Helps spot mistakes before applying.

## Run the command terraform plan

```
mujju@VMterra:~/b11/f11$ 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.filecreation1 will be created
+ resource "local_file" "filecreation1" {
+   content          = "This is the content of file one."
+   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          = "file_one.txt"
+   id                 = (known after apply)
}

# local_file.filecreation2 will be created
+ resource "local_file" "filecreation2" {
+   content          = "This is the content of file two."
+   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          = "file_two.txt"
+   id                 = (known after apply)
}

# local_file.filecreation3 will be created
+ resource "local_file" "filecreation3" {
+   content          = "This is the content of file three."
+   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          = "file_three.txt"
+   id                 = (known after apply)
}

Plan: 3 to add, 0 to change, 0 to destroy.
```

## terraform apply

- This is the **action** step.
- Terraform uses our .tf files to actually:
  - Create, modify, or delete real resources (VMs, networks, etc.).
- We will usually get a confirmation prompt before changes happen.

```
mujju@VMterra:~/b11/f11$ 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.filecreation1 will be created
+ resource "local_file" "filecreation1" {
+   content          = "This is the content of file one."
+   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          = "file_one.txt"
+   id                 = (known after apply)
}

# local_file.filecreation2 will be created
+ resource "local_file" "filecreation2" {
+   content          = "This is the content of file two."
+   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          = "file_two.txt"
+   id                 = (known after apply)
}

# local_file.filecreation3 will be created
+ resource "local_file" "filecreation3" {
+   content          = "This is the content of file three."
+   content_base64sha256 = (known after apply)
+   content_base64sha512 = (known after apply)
+   content_md5       = (known after apply)
}
```

```

+ content_sha256      = (known after apply)
+ content_sha512      = (known after apply)
+ directory_permission = "0777"
+ file_permission     = "0777"
+ filename            = "file_three.txt"
+ id                  = (known after apply)
}

Plan: 3 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.filecreation1: Creating ...
local_file.filecreation3: Creating ...
local_file.filecreation2: Creating ...
local_file.filecreation3: Creation complete after 0s [id=a051bdb377374296f9fd2edf2c183c0006b4ba4f]
local_file.filecreation2: Creation complete after 0s [id=3b40ba9e72907343805f6496ffaa3af091821044]
local_file.filecreation1: Creation complete after 0s [id=420ac18063cb6cc9b69f37d7ddce4812561d24bc]

Apply complete! Resources: 3 added, 0 changed, 0 destroyed.
mujju@VMterra:~/b11/f11$ █

```

Check the contents of directory using **tree -a**

```

mujju@VMterra:~/b11/f11$ tree -a
.
├── .terraform
│   ├── providers
│   │   ├── registry.terraform.io
│   │   ├── hashicorp
│   │   └── local
│   │       ├── 2.5.3
│   │       │   ├── linux_amd64
│   │       │   └── LICENSE.txt
│   │       └── terraform-provider-local_v2.5.3_x5
├── .terraform.lock.hcl
├── file.tf
├── file_one.txt
├── file_three.txt
├── file_two.txt
└── terraform.tfstate

7 directories, 8 files
mujju@VMterra:~/b11/f11$ █

```