

Kodeflix Originals

studio.kodecloud.com/labs/terraform/terraform-hcl

Back to Domain Terraform HCL Learn HashiCorp Configuration Language (HCL) syntax and basics. Beginner 60-90 min

Task Hint AI Assistant (Beta) 52:22

5 / 18 Next →

What is the resource name used for the `local_file` resource in this configuration file?

local  
favorite-games  
games  
file  
local\_file

Terminal 1

```
root in ~ on 🌩 (us-east-1)
> cd /root/terraform-projects/HCL
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
> ls
main.tf
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
> cat main.tf
resource "local_file" "games" {
  file    = "/root/favorite-games"
  content = "FIFA 21"
}
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
>
```

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Task Hint AI Assistant (Beta) 50:05

6 / 18 Next →

What is the name of the provider for which we are creating this resource?

local  
local\_file  
file  
game

Terminal 1

```
root in ~ on 🌩 (us-east-1)
> cd /root/terraform-projects/HCL
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
> ls
main.tf
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
> cat main.tf
resource "local_file" "games" {
  file    = "/root/favorite-games"
  content = "FIFA 21"
}
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
> terraform providers

Providers required by configuration:
└─ provider[registry.terraform.io/hashicorp/local]
root in ~/terraform-projects/HCL via 🌩 default on 🌩 (us-east-1)
>
```

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Task Hint AI Assistant (Beta) 32:45

7 / 18 Next →

Which one of the below is not an example of an argument used within the resource block?

filename = "/root/favorite-games"

content = "FIFA 21"

resource\_type = "local\_file"

Terminal 1 Terminal 2 + Stop Lab

```
root in ~/terraform-projects/HCL via default on (us-east-1)
> ls
main.tf

root in ~/terraform-projects/HCL via default on (us-east-1)
> cat main.tf
resource "local_file" "games" {
  file    = "/root/favorite-games"
  content = "FIFA 21"
}
```

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Task Hint AI Assistant (Beta) 30:57

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If you run a `terraform plan` now? Would it work?

YES

NO

Terminal 1 Terminal 2 + Stop Lab

EXPLORER

- ROOT
- terraform.d
- terraform-projects / HCL
  - main.tf
  - README.md

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
root in ~/terraform-projects/HCL via default on (us-east-1)
> terraform plan

Error: Inconsistent dependency lock file

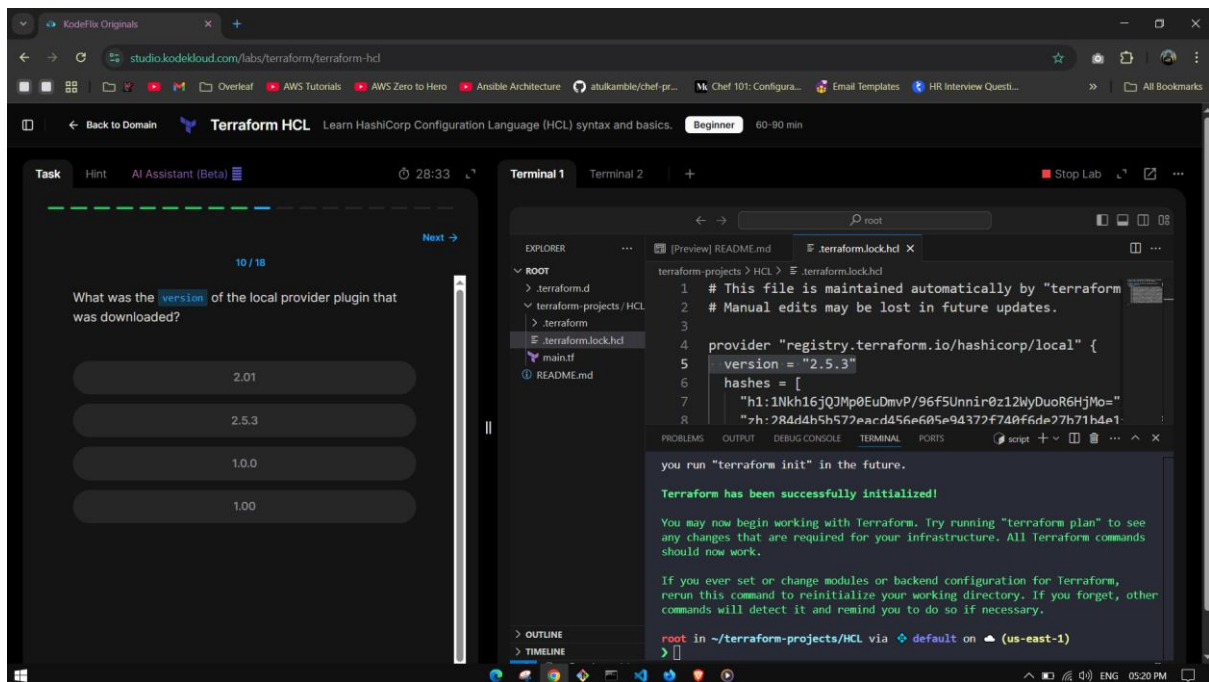
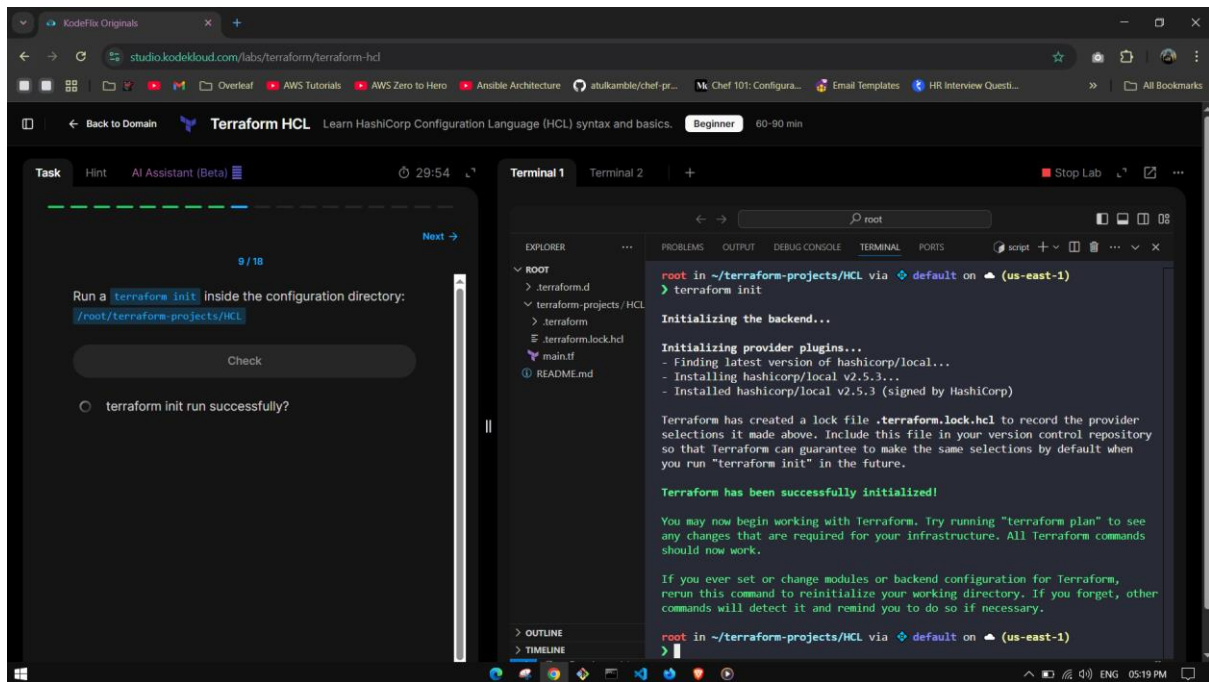
The following dependency selections recorded in the lock file are
inconsistent with the current configuration:
- provider registry.terraform.io/hashicorp/local: required by this configur
ation but no version is selected

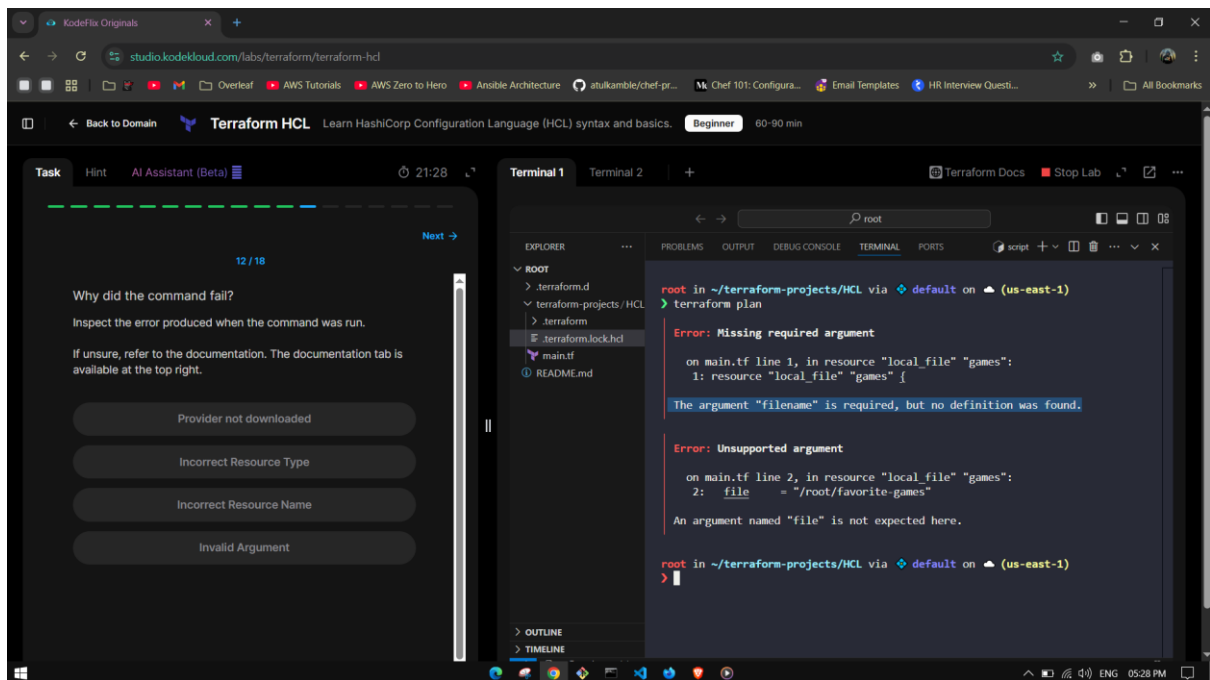
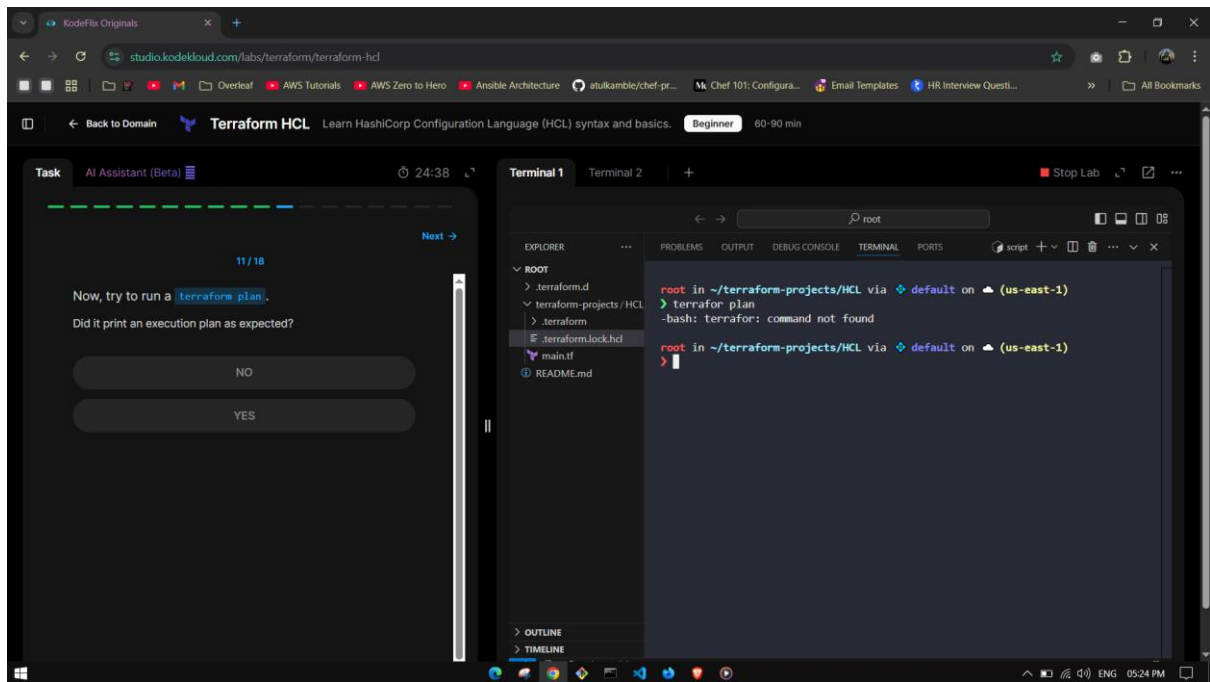
To make the initial dependency selections that will initialize the
dependency lock file, run:
  terraform init

root in ~/terraform-projects/HCL via default on (us-east-1)
>
```

OUTLINE

TIMELINE







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Task AI Assistant (Beta) 20:40

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Which of the following is not a valid argument for the `local_file` resource?

If unsure, refer to the documentation.

filename

content

sensitive\_content

file\_permission

file

Terminal 1

terminal 2

Terraform Docs Stop Lab

root

EXPLORER

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

terraform plan

Error: Missing required argument

on main.tf line 1, in resource "local\_file" "games":  
1: resource "local\_file" "games" {

The argument "filename" is required, but no definition was found.

Error: Unsupported argument

on main.tf line 2, in resource "local\_file" "games":  
2: file = "/root/favorite-games"

An argument named "file" is not expected here.

root in ~/terraform-projects/HCL via default on (us-east-1)

cat main.tf

resource "local\_file" "games" {  
 file = "/root/favorite-games"  
 content = "FIFA 21"  
}

root in ~/terraform-projects/HCL via default on (us-east-1)

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Task Hint AI Assistant (Beta) 18:27

14 / 18

Fix the argument in the configuration file and then run a `terraform plan` followed by `terraform apply` to create the `local_file` resource called `games`.

Check

Resource created?

Terminal 1

terminal 2

Stop Lab

root

EXPLORER

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

root in ~/terraform-projects/HCL via default on (us-east-1)

vi main.tf

root in ~/terraform-projects/HCL via default on (us-east-1) took 18s

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.games will be created  
+ resource "local\_file" "games" {  
 + content = "FIFA 21"  
 + 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 = "/root/favorite-games"  
 + id = (known after apply)  
}

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Task Hint AI Assistant (Beta) 16:00

14 / 18 Next →

Fix the argument in the configuration file and then run a `terraform plan` followed by `terraform apply` to create the `local_file` resource called `games`.

Check

Next →

Resource created?

Terminal 1 Terminal 2 +

EXPLORER PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

ROOT

terraform.d

terraform-projects / HCL

terraform

terraform.lock.hcl

main.tf

terraform.tfstate

favorite-games

README.md

```
+ 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             = "/root/favorite-games"
+ 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.games: Creating...

local\_file.games: Creation complete after 0s [id=f68b901eb16aff12e9458bdb656a7df8d3425d4c]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

root in ~/terraform-projects/HCL via default on (us-east-1) took 3s

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15 / 18 Next →

We have now created our very first resource using Terraform! Next, let's work on updating the resource.

If you look at the output produced by the `terraform plan` and `terraform apply` commands closely, we can see that the file content is printed on the screen.

Since we do not want this to happen, we have updated the resource type.

What is the resource type that we have updated?

local\_sensitive\_content

local\_sensitive\_file

local\_file

local\_hide\_content

EXPLORER PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

ROOT

terraform.d

terraform-projects / HCL

terraform

terraform.lock.hcl

main.tf

terraform.tfstate

favorite-games

README.md

```
root in ~/terraform-projects/HCL via default on (us-east-1)
> cat main.tf
resource "local_sensitive_file" "games" {
  filename     = "/root/favorite-games"
  content      = "FIFA 21"
  sensitive_content = "FIFA 21"
}
```

root in ~/terraform-projects/HCL via default on (us-east-1)

>



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16 / 18 Next →

That's right, we have made use of the `local_sensitive_file` resource type to mask the contents of the file from the execution plan.

However, something is wrong. If we run `terraform plan` or `terraform apply`, now we see an error!

Identify and fix the issue. Remember, we don't want the content of the file to show up in the execution plan at all.

Check

Next →

Issues fixed and the resource re-created?

EXPLORER

- ROOT
  - .terraform.d
  - terraform-projects / HCL
    - .terraform
    - terraform.lock.hcl
    - main.tf
    - terraform.tfstate
    - terraform.tfstate.bac...
    - favorite-games
    - README.md

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
+ content_sha1 = (known after apply)
+ content_sha256 = (known after apply)
+ content_sha512 = (known after apply)
+ directory_permission = "0700"
+ file_permission = "0700"
+ filename = "/root/favorite-games"
+ id = (known after apply)
}
```

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.games: Destroying... [id=f68b901eb16aff12e9458bdb656a7df8d3425d4c]  
local\_file.games: Destruction complete after 0s  
local\_sensitive\_file.games: Creating...  
local\_sensitive\_file.games: Creation complete after 0s [id=f68b901eb16aff12e9458bdb656a7df8d3425d4c]

Apply complete! Resources: 1 added, 0 changed, 1 destroyed.

root in ~/terraform-projects/HCL via default on (us-east-1) took 3s

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17 / 18 Next →

Notice that the `content` of the file was not displayed when using `local_sensitive_file` instead of the `local_file` resource.

Note: Refer to the documentation to see all the arguments supported by this resource.

Also note that as Terraform follows an immutable infrastructure approach, the file was recreated although the contents are the same.

Ok

EXPLORER

- ROOT
  - .terraform.d
  - terraform-projects / HCL
    - .terraform
    - terraform.lock.hcl
    - main.tf
    - terraform.tfstate
    - terraform.tfstate.bac...
    - favorite-games
    - README.md

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
root in ~/terraform-projects/HCL via default on (us-east-1)
>
```

OUTLINE

TIMELINE

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18 / 18

Finally, destroy this resource using `terraform destroy`.

Check

Next →

Resource destroyed?

EXPLORER

- ROOT
  - .terraform.d
  - terraform-projects / HCL
    - .terraform
    - terraform.lock.hcl
    - main.tf
    - terraform.tfstate
    - terraform.tfstate.bac...
    - README.md

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
root in ~/terraform-projects/HCL via default on (us-east-1)
> terraform destroy
local_sensitive_file.games: Refreshing state... [id=f68b901eb16aff12e9458bdb656a7df8d3425d4c]

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_sensitive_file.games will be destroyed
- resource "local_sensitive_file" "games" {
  - content          = (sensitive value) -> null
  - content_base64sha256 = "00qt1fV19H412mXN85/Y9evwvDIXEw4ooJpmph2eolUV=" -> null
  - content_base64sha512 = "F0zrL19RS+tFB53xwISp1R3wvRQ/Sw4hsxwyskamsAk/cNyHr/X/pmykTTTuvkRvr+3y+5c7Sc/3/ObRRDXImIg==" -> null
  - content_md5        = "44a271e06ddd134cdbeab299288422f3" -> null
  - content_sha1       = "f68b901eb16aff12e9458bdb656a7df8d3425d4c" -> null
  - content_sha256     = "d106ad95f565f47e35da65cd079fd8f5ebf0ac3231116e28a09a66a61d9ea146" -> null
  - content_sha512     = "174ccb23d452fad141e77c70212a75477c2f450fd2c3886cc70cac59a9ac024fdc3721ebfd7fe99a6ca44d30aebc446fafedf2fb973b49cfc9fce6d1457d6622" -> null
}
```

Ln 5, Col 1 (19 selected) Spaces: 2 UTF-8 LF Plain Text Layout: US

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CONGRATULATIONS!!!!

You have successfully completed the challenge.

End lab session

EXPLORER

- ROOT
  - .terraform.d
  - terraform-projects / HCL
    - .terraform
    - terraform.lock.hcl
    - main.tf
    - terraform.tfstate
    - terraform.tfstate.bac...
    - README.md

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
root in ~/terraform-projects/HCL via default on (us-east-1)
>
```

Ln 5, Col 1 (19 selected) Spaces: 2 UTF-8 LF Plain Text Layout: US