**TERRAFORM ASSIGN 6 (Input Variables)**

**Variables.tf**

variable "instance\_name" {

description = "Value of the Name tag for the EC2 instance"

type = string

default = "AWS instance"

}

**Main.tf**

terraform {

required\_providers {

aws = {

source = "hashicorp/aws"

version = "~> 4.14.0"

}

}

required\_version = ">= 0.14.9"

}

provider "aws" {

profile = "default"

region = "ap-south-1"

}

resource "aws\_instance" "app\_server" {

ami = "ami-0f2e255ec956ade7f"

instance\_type = "t2.micro"

tags = {

Name = var.instance\_name

}

}

Here we have changed the name in **main.tf with the variable name**

**Hands on :**

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>type nul > variables.tf

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply

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

[32m+[0m create

[0m

Terraform will perform the following actions:

[1m # aws\_instance.app\_server[0m will be created[0m[0m

[0m [32m+[0m[0m resource "aws\_instance" "app\_server" {

[32m+[0m [0m[1m[0mami[0m[0m = "ami-0f2e255ec956ade7f"

[32m+[0m [0m[1m[0marn[0m[0m = (known after apply)

[32m+[0m [0m[1m[0massociate\_public\_ip\_address[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mavailability\_zone[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mcpu\_core\_count[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mcpu\_threads\_per\_core[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mdisable\_api\_termination[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mebs\_optimized[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mget\_password\_data[0m[0m = false

[32m+[0m [0m[1m[0mhost\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mid[0m[0m = (known after apply)

[32m+[0m [0m[1m[0minstance\_initiated\_shutdown\_behavior[0m[0m = (known after apply)

[32m+[0m [0m[1m[0minstance\_state[0m[0m = (known after apply)

[32m+[0m [0m[1m[0minstance\_type[0m[0m = "t2.micro"

[32m+[0m [0m[1m[0mipv6\_address\_count[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mipv6\_addresses[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mkey\_name[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mmonitoring[0m[0m = (known after apply)

[32m+[0m [0m[1m[0moutpost\_arn[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mpassword\_data[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mplacement\_group[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mplacement\_partition\_number[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mprimary\_network\_interface\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mprivate\_dns[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mprivate\_ip[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mpublic\_dns[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mpublic\_ip[0m[0m = (known after apply)

[32m+[0m [0m[1m[0msecondary\_private\_ips[0m[0m = (known after apply)

[32m+[0m [0m[1m[0msecurity\_groups[0m[0m = (known after apply)

[32m+[0m [0m[1m[0msource\_dest\_check[0m[0m = true

[32m+[0m [0m[1m[0msubnet\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mtags[0m[0m = {

[32m+[0m [0m"Name" = "AWS instance"

}

[32m+[0m [0m[1m[0mtags\_all[0m[0m = {

[32m+[0m [0m"Name" = "AWS instance"

}

[32m+[0m [0m[1m[0mtenancy[0m[0m = (known after apply)

[32m+[0m [0m[1m[0muser\_data[0m[0m = (known after apply)

[32m+[0m [0m[1m[0muser\_data\_base64[0m[0m = (known after apply)

[32m+[0m [0m[1m[0muser\_data\_replace\_on\_change[0m[0m = false

[32m+[0m [0m[1m[0mvpc\_security\_group\_ids[0m[0m = (known after apply)

[32m+[0m [0mcapacity\_reservation\_specification {

[32m+[0m [0m[1m[0mcapacity\_reservation\_preference[0m[0m = (known after apply)

[32m+[0m [0mcapacity\_reservation\_target {

[32m+[0m [0m[1m[0mcapacity\_reservation\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mcapacity\_reservation\_resource\_group\_arn[0m[0m = (known after apply)

}

}

[32m+[0m [0mebs\_block\_device {

[32m+[0m [0m[1m[0mdelete\_on\_termination[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mdevice\_name[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mencrypted[0m[0m = (known after apply)

[32m+[0m [0m[1m[0miops[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mkms\_key\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0msnapshot\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mtags[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mthroughput[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvolume\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvolume\_size[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvolume\_type[0m[0m = (known after apply)

}

[32m+[0m [0menclave\_options {

[32m+[0m [0m[1m[0menabled[0m[0m = (known after apply)

}

[32m+[0m [0mephemeral\_block\_device {

[32m+[0m [0m[1m[0mdevice\_name[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mno\_device[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvirtual\_name[0m[0m = (known after apply)

}

[32m+[0m [0mmaintenance\_options {

[32m+[0m [0m[1m[0mauto\_recovery[0m[0m = (known after apply)

}

[32m+[0m [0mmetadata\_options {

[32m+[0m [0m[1m[0mhttp\_endpoint[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mhttp\_put\_response\_hop\_limit[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mhttp\_tokens[0m[0m = (known after apply)

[32m+[0m [0m[1m[0minstance\_metadata\_tags[0m[0m = (known after apply)

}

[32m+[0m [0mnetwork\_interface {

[32m+[0m [0m[1m[0mdelete\_on\_termination[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mdevice\_index[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mnetwork\_card\_index[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mnetwork\_interface\_id[0m[0m = (known after apply)

}

[32m+[0m [0mroot\_block\_device {

[32m+[0m [0m[1m[0mdelete\_on\_termination[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mdevice\_name[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mencrypted[0m[0m = (known after apply)

[32m+[0m [0m[1m[0miops[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mkms\_key\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mtags[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mthroughput[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvolume\_id[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvolume\_size[0m[0m = (known after apply)

[32m+[0m [0m[1m[0mvolume\_type[0m[0m = (known after apply)

}

}

[0m[1mPlan:[0m 1 to add, 0 to change, 0 to destroy.

[0m[0m[1m

Do you want to perform these actions?[0m

Terraform will perform the actions described above.

Only 'yes' will be accepted to approve.

[1mEnter a value:[0m [0myes

[0m[1maws\_instance.app\_server: Creating...[0m[0m

[0m[1maws\_instance.app\_server: Still creating... [10s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Still creating... [20s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Still creating... [30s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Still creating... [40s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Still creating... [50s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Still creating... [1m0s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Still creating... [1m10s elapsed][0m[0m

[0m[1maws\_instance.app\_server: Creation complete after 1m13s [id=i-093aaff1aaad86754][0m

[0m[1m[32m

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

[0m

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply -var 'instance\_name=YetAnotherName'

[31m╷[0m[0m

[31m│[0m [0m[1m[31mError: [0m[0m[1mValue for undeclared variable[0m

[31m│[0m [0m

[31m│[0m [0m[0mA variable named "'instance\_name" was assigned on the command line, but the root module does not declare a variable of that name. To use this value, add a "variable"

[31m│[0m [0mblock to the configuration.

[31m╵[0m[0m

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply

[0m[1maws\_instance.app\_server: Refreshing state... [id=i-093aaff1aaad86754][0m

[0m

[1m[36mNote:[0m[1m Objects have changed outside of Terraform[0m

[0mTerraform detected the following changes made outside of Terraform since the last "terraform apply":

[1m # aws\_instance.app\_server[0m has changed[0m[0m

[0m [33m~[0m[0m resource "aws\_instance" "app\_server" {

[1m[0mid[0m[0m = "i-093aaff1aaad86754"

[33m~[0m [0m[1m[0minstance\_state[0m[0m = "running" [33m->[0m [0m"stopping"

[1m[0mtags[0m[0m = {

"Name" = "AWS instance"

}

[90m# (28 unchanged attributes hidden)[0m[0m

[90m# (6 unchanged blocks hidden)[0m[0m

}

Unless you have made equivalent changes to your configuration, or ignored the relevant attributes using ignore\_changes, the following plan may include actions to undo

or respond to these changes.

[90m

───────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────[0m

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

[33m~[0m update in-place

[0m

Terraform will perform the following actions:

[1m # aws\_instance.app\_server[0m will be updated in-place[0m[0m

[0m [33m~[0m[0m resource "aws\_instance" "app\_server" {

[1m[0mid[0m[0m = "i-093aaff1aaad86754"

[33m~[0m [0m[1m[0mtags[0m[0m = {

[33m~[0m [0m"Name" = "AWS instance" [33m->[0m [0m"ExampleAppServerInstance"

}

[33m~[0m [0m[1m[0mtags\_all[0m[0m = {

[33m~[0m [0m"Name" = "AWS instance" [33m->[0m [0m"ExampleAppServerInstance"

}

[90m# (28 unchanged attributes hidden)[0m[0m

[90m# (6 unchanged blocks hidden)[0m[0m

}

[0m[1mPlan:[0m 0 to add, 1 to change, 0 to destroy.

[0m[0m[1m

Do you want to perform these actions?[0m

Terraform will perform the actions described above.

Only 'yes' will be accepted to approve.

[1mEnter a value:[0m [0myes

[0m[1maws\_instance.app\_server: Modifying... [id=i-093aaff1aaad86754][0m[0m

[0m[1maws\_instance.app\_server: Modifications complete after 1s [id=i-093aaff1aaad86754][0m

[0m[1m[32m

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

[0m

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply -var 'instance\_name=YetAnotherName'

[31m╷[0m[0m

[31m│[0m [0m[1m[31mError: [0m[0m[1mValue for undeclared variable[0m

[31m│[0m [0m

[31m│[0m [0m[0mA variable named "'instance\_name" was assigned on the command line, but the root module does not declare a variable of that name. To use this value, add a "variable"

[31m│[0m [0mblock to the configuration.

[31m╵[0m[0m

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply

[0m[1maws\_instance.app\_server: Refreshing state... [id=i-093aaff1aaad86754][0m

[0m

[1m[36mNote:[0m[1m Objects have changed outside of Terraform[0m

[0mTerraform detected the following changes made outside of Terraform since the last "terraform apply":

[1m # aws\_instance.app\_server[0m has changed[0m[0m

[0m [33m~[0m[0m resource "aws\_instance" "app\_server" {

[33m~[0m [0m[1m[0massociate\_public\_ip\_address[0m[0m = true [33m->[0m [0mfalse

[1m[0mid[0m[0m = "i-093aaff1aaad86754"

[33m~[0m [0m[1m[0minstance\_state[0m[0m = "stopping" [33m->[0m [0m"stopped"

[31m-[0m [0m[1m[0mpublic\_dns[0m[0m = "ec2-13-232-40-72.ap-south-1.compute.amazonaws.com" [90m->[0m [0m[90mnull[0m[0m

[31m-[0m [0m[1m[0mpublic\_ip[0m[0m = "13.232.40.72" [90m->[0m [0m[90mnull[0m[0m

[1m[0mtags[0m[0m = {

"Name" = "ExampleAppServerInstance"

}

[90m# (25 unchanged attributes hidden)[0m[0m

[90m# (6 unchanged blocks hidden)[0m[0m

}

Unless you have made equivalent changes to your configuration, or ignored the relevant attributes using ignore\_changes, the following plan may include actions to undo

or respond to these changes.

[90m

───────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────[0m

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

[33m~[0m update in-place

[0m

Terraform will perform the following actions:

[1m # aws\_instance.app\_server[0m will be updated in-place[0m[0m

[0m [33m~[0m[0m resource "aws\_instance" "app\_server" {

[1m[0mid[0m[0m = "i-093aaff1aaad86754"

[33m~[0m [0m[1m[0mtags[0m[0m = {

[33m~[0m [0m"Name" = "ExampleAppServerInstance" [33m->[0m [0m"AWS instance"

}

[33m~[0m [0m[1m[0mtags\_all[0m[0m = {

[33m~[0m [0m"Name" = "ExampleAppServerInstance" [33m->[0m [0m"AWS instance"

}

[90m# (26 unchanged attributes hidden)[0m[0m

[90m# (6 unchanged blocks hidden)[0m[0m

}

[0m[1mPlan:[0m 0 to add, 1 to change, 0 to destroy.

[0m[0m[1m

Do you want to perform these actions?[0m

Terraform will perform the actions described above.

Only 'yes' will be accepted to approve.

[1mEnter a value:[0m [0myes

[0m[1maws\_instance.app\_server: Modifying... [id=i-093aaff1aaad86754][0m[0m

[0m[1maws\_instance.app\_server: Modifications complete after 1s [id=i-093aaff1aaad86754][0m

[0m[1m[32m

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

[0m

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply -var 'instance\_name=YetAnotherName'

[31m╷[0m[0m

[31m│[0m [0m[1m[31mError: [0m[0m[1mValue for undeclared variable[0m

[31m│[0m [0m

[31m│[0m [0m[0mA variable named "'instance\_name" was assigned on the command line, but the root module does not declare a variable of that name. To use this value, add a "variable"

[31m│[0m [0mblock to the configuration.

[31m╵[0m[0m

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply -variable 'instance\_name=YetAnotherName'

[31m╷[0m[0m

[31m│[0m [0m[1m[31mError: [0m[0m[1mFailed to parse command-line flags[0m

[31m│[0m [0m

[31m│[0m [0m[0mflag provided but not defined: -variable

[31m╵[0m[0m

For more help on using this command, run:

terraform apply -help

C:\Users\user\Downloads\terraform\_1.1.9\_windows\_amd64>terraform apply -var "instance\_name=YetAnotherName"

[0m[1maws\_instance.app\_server: Refreshing state... [id=i-093aaff1aaad86754][0m

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

[33m~[0m update in-place

[0m

Terraform will perform the following actions:

[1m # aws\_instance.app\_server[0m will be updated in-place[0m[0m

[0m [33m~[0m[0m resource "aws\_instance" "app\_server" {

[1m[0mid[0m[0m = "i-093aaff1aaad86754"

[33m~[0m [0m[1m[0mtags[0m[0m = {

[33m~[0m [0m"Name" = "AWS instance" [33m->[0m [0m"YetAnotherName"

}

[33m~[0m [0m[1m[0mtags\_all[0m[0m = {

[33m~[0m [0m"Name" = "AWS instance" [33m->[0m [0m"YetAnotherName"

}

[90m# (26 unchanged attributes hidden)[0m[0m

[90m# (6 unchanged blocks hidden)[0m[0m

}

[0m[1mPlan:[0m 0 to add, 1 to change, 0 to destroy.

[0m[0m[1m

Do you want to perform these actions?[0m

Terraform will perform the actions described above.

Only 'yes' will be accepted to approve.

[1mEnter a value:[0m [0myes

[0m[1maws\_instance.app\_server: Modifying... [id=i-093aaff1aaad86754][0m[0m

[0m[1maws\_instance.app\_server: Modifications complete after 1s [id=i-093aaff1aaad86754][0m

[0m[1m[32m

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