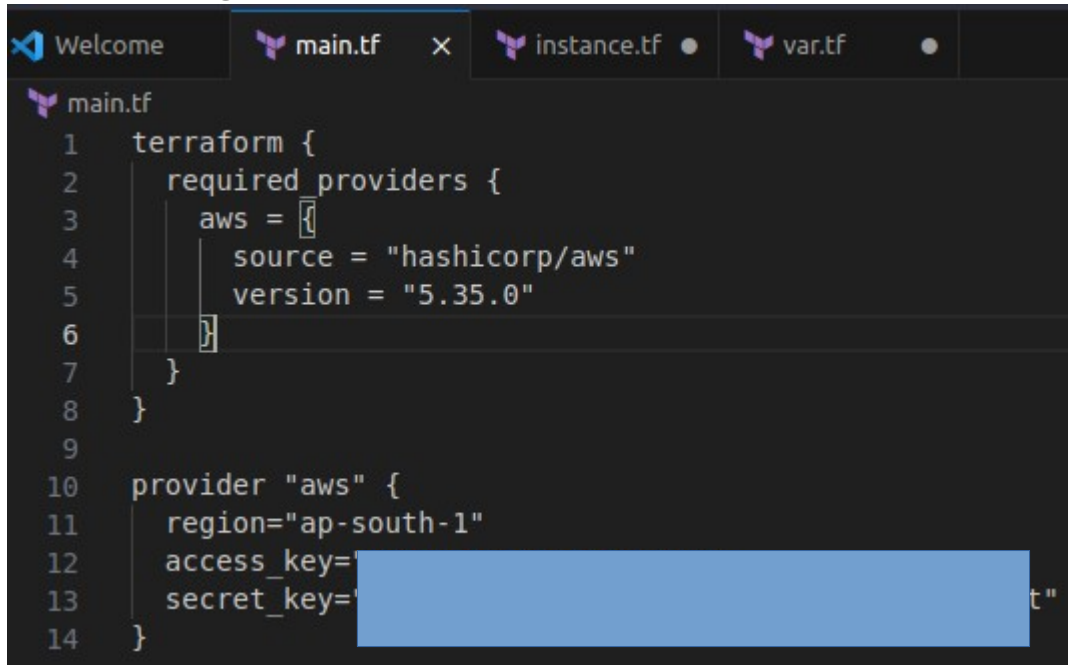


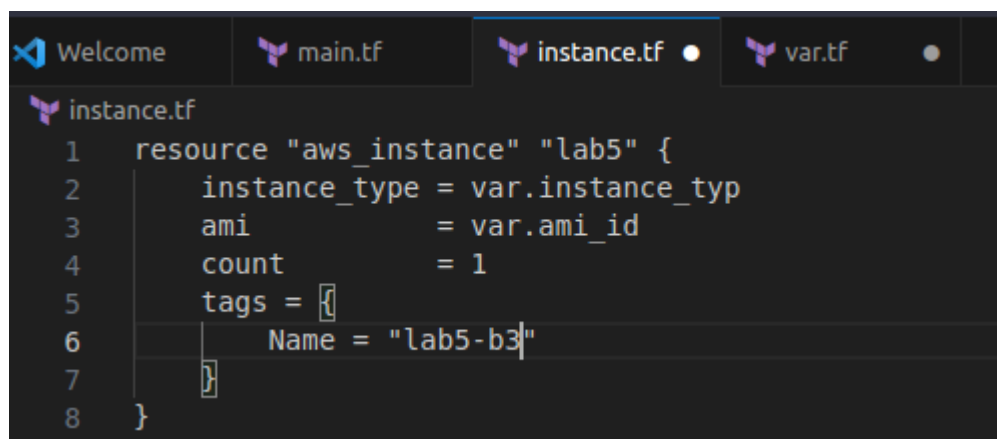
## LAB-5

### Terraform Variable with Command Line Argument

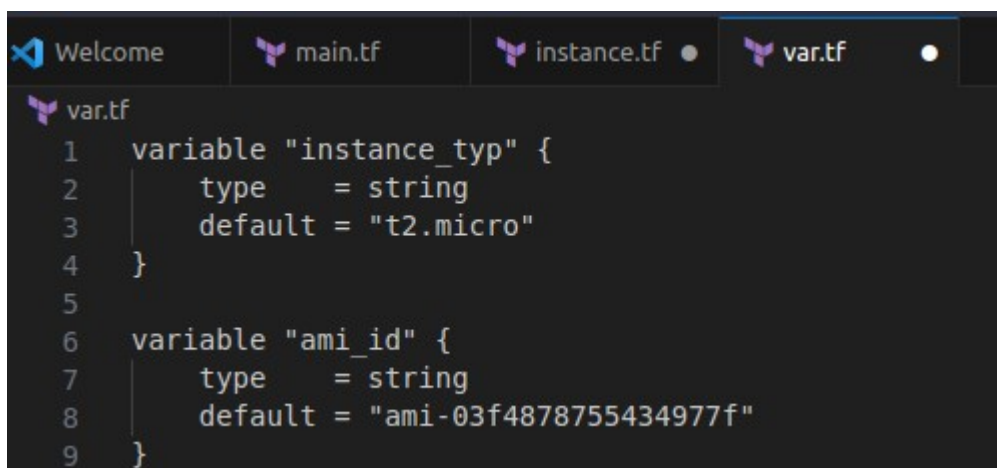
**Step1:** Make changes in var.tf file



```
1 terraform {
2   required_providers {
3     aws = {
4       source = "hashicorp/aws"
5       version = "5.35.0"
6     }
7   }
8 }
9
10 provider "aws" {
11   region="ap-south-1"
12   access_key=
13   secret_key=
14 }
```



```
1 resource "aws_instance" "lab5" {
2   instance_type = var.instance_typ
3   ami           = var.ami_id
4   count        = 1
5   tags = {
6     Name = "lab5-b3"
7   }
8 }
```



```
1 variable "instance_typ" {
2   type    = string
3   default = "t2.micro"
4 }
5
6 variable "ami_id" {
7   type    = string
8   default = "ami-03f4878755434977f"
9 }
```

## Step 2: Now we need to run terraform cycle

```
~/terraform v1.7.2default as
X terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v5.35.0

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.
```

```
~/terraform v1.7.2default as
→ terraform validate
Success! The configuration is valid.
```

## Now we have to ways to declare variable in CLI

**First:** We can give value after running terraform plan

```
~/terraform v1.7.2default as
→ 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.lab4[0] will be created
+ resource "aws_instance" "lab4" {
  + ami                    = "ami-03f4878755434977f"
  + 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)
}
```

## Second: By declaring variable during running command

```
~/terraform v1.7.2default as took 9s  
→ terraform plan -var 'instance_type=t2.micro'
```

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.lab4[0] will be created  
+ resource "aws_instance" "lab4" {  
  + ami                        = "ami-03f4878755434977f"  
  + 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                   = (known after apply)  
  + monitoring                  = (known after apply)  
  + outpost_arn                = (known after apply)
```

```
~/terraform v1.7.2default as  
→ terraform apply  
var.instance_type  
Enter a value: t2.micro
```

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.lab4[0] will be created  
+ resource "aws_instance" "lab4" {  
  + ami                        = "ami-03f4878755434977f"  
  + 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                   = (known after apply)  
  + monitoring                  = (known after apply)  
  + outpost_arn                = (known after apply)
```

Instances (3) Info							
Find Instance by attribute or tag (case-sensitive)							
Any state							
Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
lab4	i-0ffb5579db70a0ec2	Running	t2.micro	Initializing	View alarms	ap-south-1a	ec2-1

```
~/terraform v1.7.2default as took 42s
→ terraform destroy
var.instance_type
  Enter a value: t2.micro

aws_instance.lab4[0]: Refreshing state... [id=i-0ffb5579db70a0ec2]

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:

# aws_instance.lab4[0] will be destroyed
- resource "aws_instance" "lab4" {
  - ami                  = "ami-03f4878755434977f" -> null
  - arn                  = "arn:aws:ec2:ap-south-1:339713060087:instance/i-0ffb5579db70a0ec2" -> null
  - associate_public_ip_address = true -> null
  - availability_zone     = "ap-south-1a" -> null
  - cpu_core_count        = 1 -> null
  - cpu_threads_per_core   = 1 -> null
  - disable_api_stop       = false -> null
  - disable_api_termination = false -> null
  - ebs_optimized          = false -> null
  - get_password_data      = false -> null
  - hibernation            = false -> null
  - id                    = "i-0ffb5579db70a0ec2" -> null
  - instance_initiated_shutdown_behavior = "stop" -> null
  - instance_state         = "running" -> null
  - instance_type          = "t2.micro" -> null
  - ipv6_address_count     = 0 -> null
  - ipv6_addresses         = [] -> null
  - monitoring             = false -> null
  - placement_partition_number = 0 -> null
  - primary_network_interface_id = "eni-0aa27f5310070006d" -> null
  - private_dns            = "ip-172-31-40-48.ap-south-1.compute.internal" -> null
  - private_ip             = "172.31.40.48" -> null
  - public_dns             = "ec2-15-206-80-89.ap-south-1.compute.amazonaws.com" -> null
  - public_ip              = "15.206.80.89" -> null
  - secondary_private_ips   = [] -> null
  - security_groups         = [
    - "default",
  ] -> null
  - source_dest_check       = true -> null
}
```

rch [Alt+S] Mumbai Saksham.1411

Instances (3) Info

Find Instance by attribute or tag (case-sensitive) Any state

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	lab4	i-0ffb5579db70a0ec2	Terminated	t2.micro	-	<a href="#">View alarms +</a>	ap-south-1a