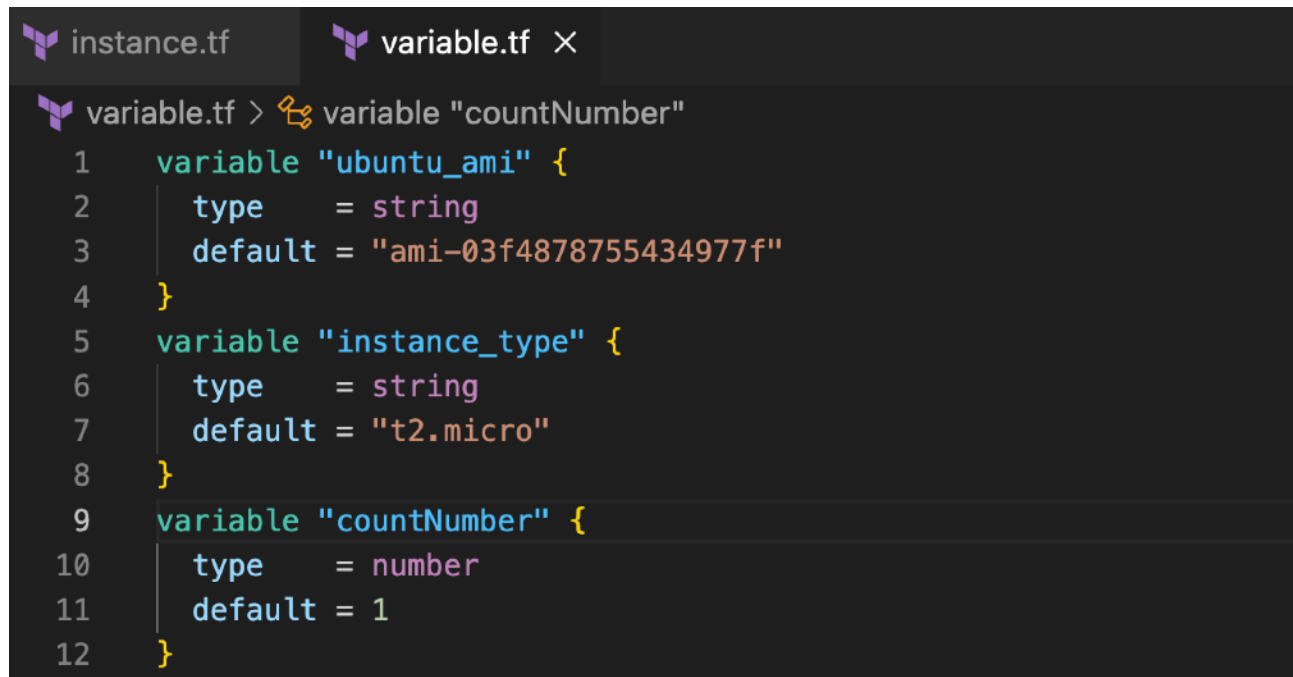


SPCM LAB-5

Objective: Learn how to define and use variables in Terraform configuration.

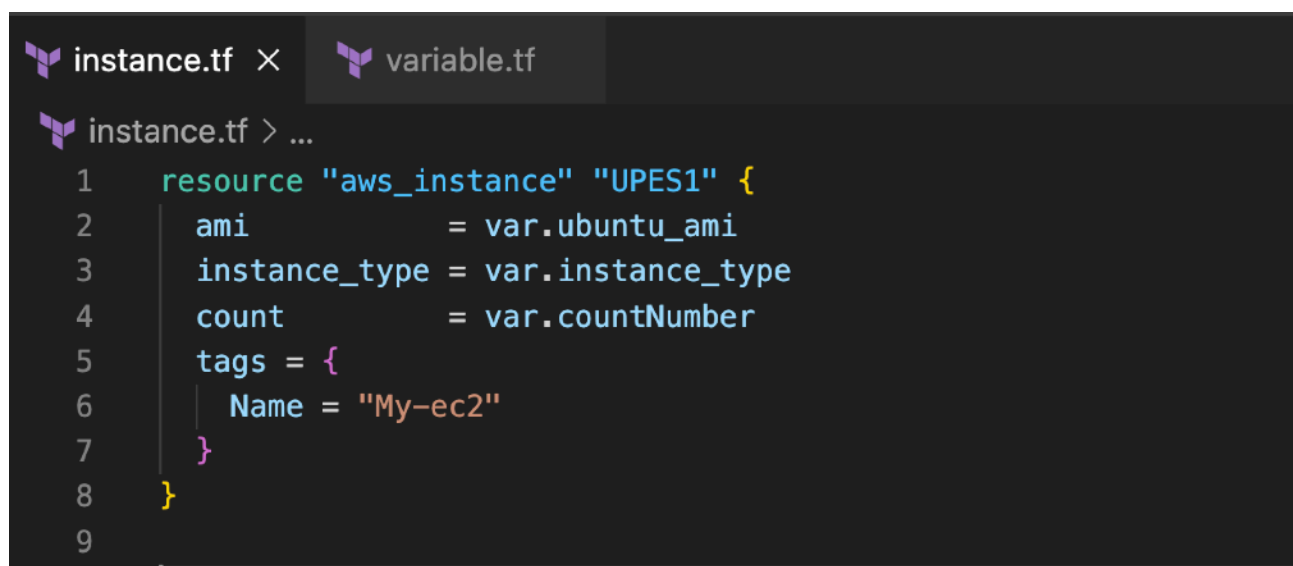
- Create a file variable.tf with the following contents.

```
gauravbhandari@gauravs-MacBook-Air-2 aws-terraform-demo % touch variable.tf
```



```
variable.tf > variable "countNumber"
1  variable "ubuntu_ami" {
2      type      = string
3      default   = "ami-03f4878755434977f"
4  }
5  variable "instance_type" {
6      type      = string
7      default   = "t2.micro"
8  }
9  variable "countNumber" {
10     type      = number
11     default   = 1
12 }
```

- Use the variable declared and defined in variable.tf in instance.tf



```
instance.tf > ...
1  resource "aws_instance" "UPES1" {
2      ami            = var.ubuntu_ami
3      instance_type  = var.instance_type
4      count          = var.countNumber
5      tags = {
6          Name = "My-ec2"
7      }
8  }
9
```

- Run the command terraform plan and review the plan to see if it meets your expectations

```
gauravbhandari@gauravs-MacBook-Air-2 aws-terraform-demo % terraform plan -var "ubuntu_ami=ami-03f4878755434977f" -var "instance_type=t2.micro" -var "countNumber=1"
```

```
+ user_data_replace_on_change = false
+ vpc_security_group_ids      = (known after apply)
}
```

Plan: 1 to add, 0 to change, 0 to destroy.

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.

- Run terraform apply and create the resources.

```
gauravbhandari@gauravs-MacBook-Air-2 aws-terraform-demo % terraform apply -var "ubuntu_ami=ami-03f4878755434977f" -var "instance_type=t2.micro" -var "countNumber=1"
```

Plan: 1 to add, 0 to change, 0 to destroy.

```
aws_instance.UPEs1[0]: Creating...
aws_instance.UPEs1[0]: Still creating... [10s elapsed]
aws_instance.UPEs1[0]: Still creating... [20s elapsed]
aws_instance.UPEs1[0]: Still creating... [30s elapsed]
aws_instance.UPEs1[0]: Creation complete after 33s [id=i-08fe64300cdf250a]
```

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

Instances (1) Info								
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/> Any state								
Instance state = running Clear filters								
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publ
<input type="checkbox"/>	My-ec2	i-08fe64300cdf250a	Running	t2.micro	Initializing	View alarms	ap-south-1a	ec2-

- When you are done experimenting, run the following command to destroy the created resources.

Plan: 0 to add, 0 to change, 1 to destroy.

```
aws_instance.UPEs1[0]: Destroying... [id=i-08fe64300cdf250a]
aws_instance.UPEs1[0]: Still destroying... [id=i-08fe64300cdf250a, 10s elapsed]
aws_instance.UPEs1[0]: Still destroying... [id=i-08fe64300cdf250a, 20s elapsed]
aws_instance.UPEs1[0]: Still destroying... [id=i-08fe64300cdf250a, 30s elapsed]
aws_instance.UPEs1[0]: Destruction complete after 32s
```

Destroy complete! Resources: 1 destroyed.

Instances (1) Info								
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/> Any state								
Instance state = running Clear filters								
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publ
<input type="checkbox"/>	My-ec2	i-08fe64300cdf250a	Shutting-d...	t2.micro	-	View alarms	ap-south-1a	ec2-

