

# SPCM Lab-9

**Objective : Creating Multiple EC2 instances with for\_each in terraform.**

1. Create Terraform directory.

```
→ ~ mkdir terraform-ec2-for-each
→ ~ cd terraform-ec2-for-each
→ terraform-ec2-for-each
```

2. Create terraform configuration file (main.tf) :

```
provider "aws" {
  region = "us-east-1"
  access_key = "AKIA232UVZYDK5TANG62"
  secret_key = "47IqpU0zW5Q3cw6KrCxPQrbQ5M/hajeNL3wxEXn"
}

variable "instances" {
  description = "Map of EC2 instances with settings"
  default = {
    "instance1"={
      ami = "ami-0440d3b780d96b29d"
      instance_type = "t2.micro"
    },
    "instance2"={
      ami= "ami-0c7217cdde317cfec"
      instance_type="t2.micro"
    },
    "instance3" = {
      ami = "ami-0fe630eb857a6ec83"
      instance_type = "t2.micro"
    }
  }
}

resource "aws_instance" "ec2_instances" {
  for_each = var.instances
  ami = var.instances[each.key].ami
  instance_type = var.instances[each.key].instance_type
  tags = {
    Name = "EC2-${each.key}"
  }
}
```

## terraform init :

**terraform validate :**

**terraform apply :**

#### 4. Verify Users in AWS console :

Instances (3) <a href="#">Info</a>				
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>			Any state ▾	
<input type="checkbox"/>	Name	Instance ID	Instance state ▾	Instance
<input type="checkbox"/>	EC2-Instance3	i-05dcf708bf614cc7c	Running	t2.micro
<input type="checkbox"/>	EC2-Instance1	i-01bc3aec9037334f4	Running	t2.micro
<input type="checkbox"/>	EC2-Instance2	i-0b7bee6f9328cfe54	Running	t2.micro

## 5. Clean up Resources (terraform destroy) :

```
+ Lab-9 terraform destroy
aws_instance.ec2_instances["instance1"]: Refreshing state... [id=i-01bc3aec9037334f4]
aws_instance.ec2_instances["instance3"]: Refreshing state... [id=i-05dcf708bf614cc7c]
aws_instance.ec2_instances["instance2"]: Refreshing state... [id=i-0b7bee6f9328cfe54]

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.ec2_instances["instance1"] will be destroyed
- resource "aws_instance" "ec2_instances" {
  - ami              = "ami-0440d3b780d96b29d" -> null
```