

1. Terraform Script file to create 2 EC2 instances on 2 different regions and install nginx

```
provider "aws" {  
    region = "ap-south-1"  
    alias = "indian"  
}  
  
provider "aws"{  
    region = "us-east-1"  
    alias = "usa"  
}  
  
resource "aws_security_group" "sg-india" {  
    provider = aws.indian  
    name="nginx-sg-india"  
    description = "allow http and ssh"  
  
    ingress {  
        from_port = 80  
        to_port = 80  
        protocol = "tcp"  
        cidr_blocks = ["0.0.0.0/0"]  
    }  
  
    ingress {  
        from_port = 22  
        to_port = 22  
        protocol = "tcp"
```

```
        cidr_blocks = ["0.0.0.0/0"]
    }

    egress {
        from_port = 0
        to_port = 0
        protocol = "-1"
        cidr_blocks = ["0.0.0.0/0"]
    }
}

resource "aws_security_group" "sg-usa" {
    provider = aws.usa
    name="nginx-sg-usa"
    description = "allow http and ssh"

    ingress {
        from_port = 80
        to_port = 80
        protocol = "tcp"
        cidr_blocks = ["0.0.0.0/0"]
    }

    ingress {
        from_port = 22
        to_port = 22
        protocol = "tcp"
        cidr_blocks = ["0.0.0.0/0"]
    }
}
```

```
}

egress {
  from_port = 0
  to_port = 0
  protocol = "-1"
  cidr_blocks = ["0.0.0.0/0"]
}

}

resource "aws_instance" "india" {
  provider = aws.indian
  ami="ami-02d26659fd82cf299"
  instance_type = "t2.micro"
  security_groups = [aws_security_group.sg-india.name]
  user_data = <<-EOF
    #!/bin/bash
    sudo apt update -y
    sudo apt install -y nginx
    sudo systemctl enable nginx
    sudo systemctl start nginx
  EOF
}

resource "aws_instance" "america" {
  provider=aws.usa
  ami="ami-0360c520857e3138f"
```

```
instance_type = "t2.micro"
security_groups = [aws_security_group.sg-usa.name]
user_data = <<-EOF
    #!/bin/bash
    sudo apt update -y
    sudo apt install -y nginx
    sudo systemctl enable nginx
    sudo systemctl start nginx
EOF
```

```
}
```

2. Apply the commands terraform init, terraform plan

The screenshot shows the Visual Studio Code interface with a Terraform project. The Explorer panel on the left shows the project structure with files like `.terraform.lock.hcl`, `main.tf`, and `terraform.tfstate`. The main editor displays the `main.tf` file with the following content:

```
task2 > main.tf > resource "aws_instance" "india" > [ ] security_groups > 0
65 resource "aws_instance" "india" {
66     ami="ami-02d26659fd82cf299"
67     instance_type = "t2.micro"
68     key_name = "aws-server"
69     security_groups = [aws_security_group.sg-india.name]
70     user_data = <<-EOF
71     #!/bin/bash
72     sudo apt update -y
73 }
```

The OUTPUT panel at the bottom shows the Terraform plan results:

Plan: 4 to add, 0 to change, 0 to destroy.

Changes to Outputs:

- + america-region = (known after apply)
- + india-region = (known after apply)

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.

The terminal at the bottom shows the command prompt: `PS C:\Users\Azarih\Desktop\terraform\task2>`

3. Command: terraform apply

The screenshot shows the Visual Studio Code interface with a Terraform project. The Explorer panel on the left shows the project structure with files like `.terraform.lock.hcl`, `main.tf`, `terraform.tfstate`, and `terraform.tfstate.backup`. The main editor displays the `main.tf` file with the following content:

```
78 }
79
80 resource "aws_instance" "america" {
81     provider=aws.usa
82     ami="ami-0360c520857e3138f"
83     instance_type = "t2.micro"
84     security_groups = [aws_security_group.sg-usa.name]
85     user_data = <<-EOF
```

The TERMINAL panel at the bottom shows the output of the `terraform apply` command:

```
aws_instance.america: Creating...
aws_instance.america: Still creating... [00m10s elapsed]
aws_instance.america: Creation complete after 18s [id=i-0238b0c256afc21d3]

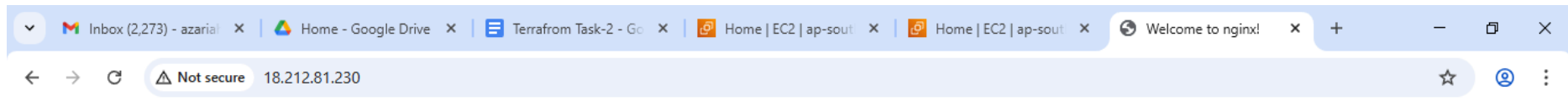
Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
```

The **Outputs:** section is highlighted with a red box, showing the following output:

```
america-region = "18.212.81.230"
india-region = "15.206.128.224"
```

The terminal prompt is `PS C:\Users\Azarih\Desktop\terraform\task2>`. The status bar at the bottom indicates the file is at line 82, column 31, with 2 spaces, UTF-8 encoding, and CRLF line endings.

4. America Region <http://18.212.81.230/>



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.



5. India Region http://15.206.128.224/

