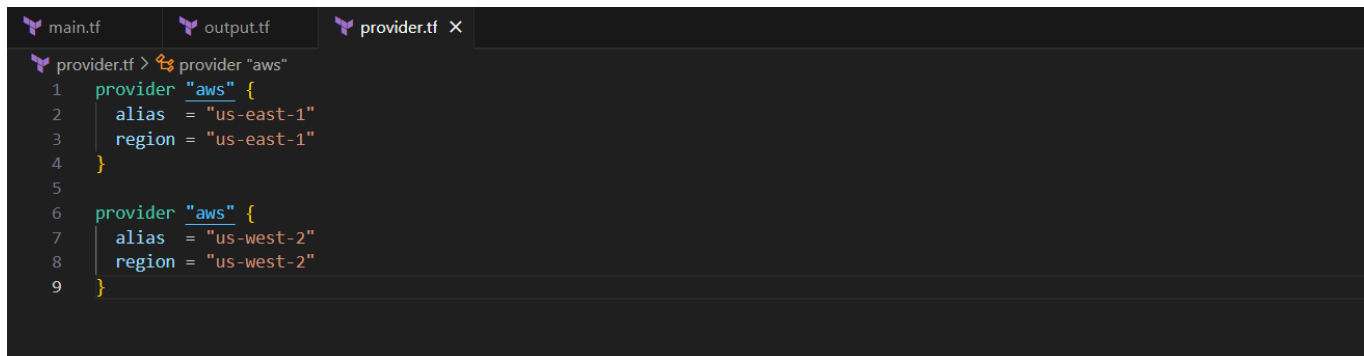# Terraform Task -2

Launch Linux EC2 instances in two regions using a single Terraform file.

```
main.tf          output.tf          provider.tf ✕

provider.tf > ⅗ provider "aws"
1    provider "aws" {
2      alias  = "us-east-1"
3      region = "us-east-1"
4    }
5
6    provider "aws" {
7      alias  = "us-west-2"
8      region = "us-west-2"
9    }
```

creating the provider file with 2 region

```
4     # }
5
6     resource "aws_security_group" "allow_ssh_http" {
7       provider = aws.us-east-1
8       name        = "allow_ssh_http"
9
10      ingress {
11        from_port   = 22
12        to_port     = 22
13        protocol    = "tcp"
14        cidr_blocks = ["0.0.0.0/0"]
15      }
16
17      ingress {
18        from_port   = 80
19        to_port     = 80
20        protocol    = "tcp"
21        cidr_blocks = ["0.0.0.0/0"]
22      }
23
24      egress {
25        from_port   = 0
26        to_port     = 0
27        protocol    = "-1"
28        cidr_blocks = ["0.0.0.0/0"]
29      }
30    }
31
32    resource "aws_security_group" "allow_ssh_http_west" {
33      provider = aws.us-west-2
34      name        = "allow_ssh_http_west"
35
36      ingress {
37        from_port   = 22
38        to_port     = 22
39        protocol    = "tcp"
40        cidr_blocks = ["0.0.0.0/0"]
41      }
42
```

Create the instance with the security group

```
56    }
57
58    resource "aws_instance" "us_east_instance" {
59      provider          = aws.us-east-1
60      ami               = "ami-0427090fd1714168b" # Replace with a valid AMI ID in us-east-1
61      instance_type     = "t2.micro"
62      key_name          = "temp"
63      security_groups   = [aws_security_group.allow_ssh_http.name]
64
65      tags = {
66        Name = "US-East-Instance"
67      }
68
69      user_data = <<-EOF
70                  #!/bin/bash
71                  sudo apt-get update -y
72                  sudo apt-get install nginx -y
73                  EOF
74    }
75
76    resource "aws_instance" "us_west_instance" {
77      provider          = aws.us-west-2
78      ami               = "ami-074be47313f84fa38" # Replace with a valid AMI ID in us-west-2
79      instance_type     = "t2.micro"
80      key_name          = "temp1"
81      security_groups   = [aws_security_group.allow_ssh_http_west.name]
82
83      tags = {
84        Name = "US-West-Instance"
85      }
86
87      user_data = <<-EOF
88                  #!/bin/bash
89                  sudo apt-get update -y
90                  sudo apt-get install nginx -y
91                  EOF
92    }
```

Ln 93, Col 1 (2 selected)   Spaces: 4   UTF-8   CRLF   {} Terraform   Go Live

Create the instance with the security group

main.tf   output.tf ×   provider.tf

output.tf > output "us_west_instance_public_ip"

```
1    output "us_east_instance_public_ip" {
2      value = aws_instance.us_east_instance.public_ip
3    }
4
5    output "us_west_instance_public_ip" {
6      value = aws_instance.us_west_instance.public_ip
7    }
```

output the IP

CREATED INSTANCE

Instances (1) Info

			[↻]	Connect	Instance state ▼	Actions ▼	**Launch instances** ▼

Find Instance by attribute or tag (case-sensitive)   All states ▼   < 1 > ⚙

	Name ✎ ▽	Instance ID	Instance state ▽	Instance type ▽	Status check	Alarm status	Availability Zo
☐	US-East-Instance	i-0c645d063e46231f2	⊘ Running 🔍 🔍	t2.micro	⊘ 2/2 checks passed	View alarms ✛	us-east-1d

ANOTHER ZONE INSTANCE

Instances (1) Info

			[↻]	Connect	Instance state ▼	Actions ▼	**Launch instances** ▼

Find Instance by attribute or tag (case-sensitive)   All states ▼   < 1 > ⚙

	Name ✎ ▽	Instance ID	Instance state ▽	Instance type ▽	Status check	Alarm status	Availability Zo
☐			⊘ Running		⊘ 2/2 checks passed	View alarms ✛	us-east-1d