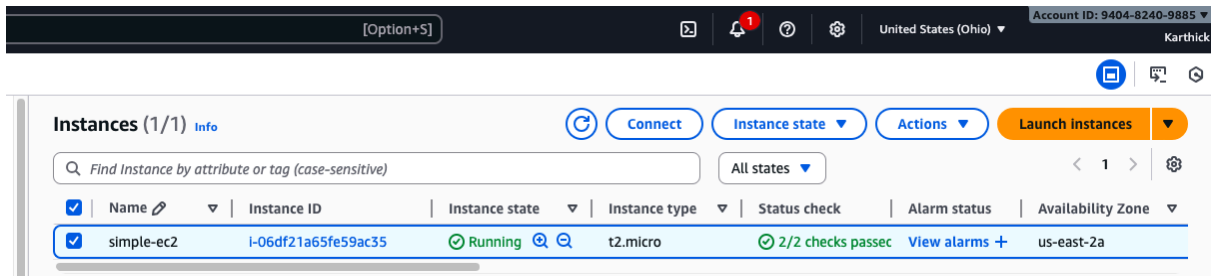Task-1:

1. Create an EC2 service in the default subnet in the Ohio region



Task-2:
2. Destroy the previous deployment

```
aws_instance.simple_ec2: Destroying... [id=i-06df21a65fe59ac35]
aws_instance.simple_ec2: Still destroying... [id=i-06df21a65fe59ac35, 00m10s elapsed]
aws_instance.simple_ec2: Still destroying... [id=i-06df21a65fe59ac35, 00m20s elapsed]
aws_instance.simple_ec2: Still destroying... [id=i-06df21a65fe59ac35, 00m30s elapsed]
aws_instance.simple_ec2: Destruction complete after 32s

Destroy complete! Resources: 1 destroyed.
root@ip-172-31-15-26:~/terraform_script#
```

3. Create a new EC2 instance with an Elastic IP
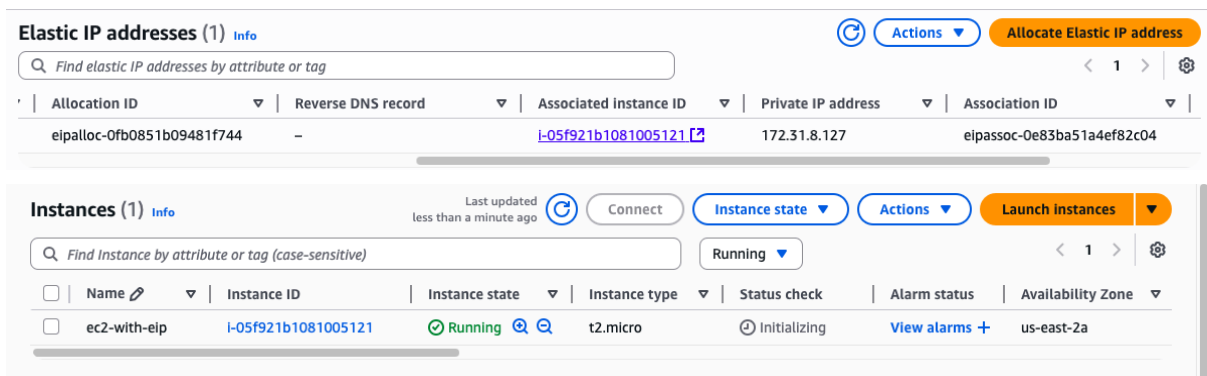


Task-3:
1. Destroy the previous deployment

```
aws_eip.web_eip: Destroying... [id=eipalloc-0fb0851b09481f744]
aws_eip.web_eip: Destruction complete after 3s
aws_instance.web: Destroying... [id=i-05f921b1081005121]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m10s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m20s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m30s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m40s elapsed]
aws_instance.web: Still destroying... [id=i-05f921b1081005121, 00m50s elapsed]
aws_instance.web: Destruction complete after 51s
```

2. Create 2 EC2 instances in Ohio and N.Virginia respectively
3. Rename Ohio's instance to 'hello-ohio' and Virginia's instance to 'hello-virginia'

**Instances (1)** Info

Last updated less than a minute ago ⟳ | Connect | Instance state ▼ | Actions ▼ | **Launch instances** ▼

🔍 Find Instance by attribute or tag (case-sensitive)

Running ▼

‹ 1 › ⚙

| | Name ✎ | ▽ | Instance ID | Instance state | ▽ | Instance type | ▽ | Status check | Alarm status | Availability Zone | ▽ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | hello-ohio | | i-06b80cfb5d4e4fd12 | ⊘ Running 🔍⊕ 🔍⊖ | | t2.micro | | ⏱ Initializing | View alarms ➕ | us-east-2a | |

**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 Zone | ▽ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | hello-virginia | | i-044e3008d3f3b1c4d | ⊘ Running 🔍⊕ 🔍⊖ | | t2.micro | | ⏱ Initializing | View alarms ➕ | us-east-1b | |

Task-4:

1. Destroy the previous deployments

```
Plan: 0 to add, 0 to change, 2 to destroy.
aws_instance.ohio_ec2: Destroying... [id=i-06b80cfb5d4e4fd12]
aws_instance.virginia_ec2: Destroying... [id=i-044e3008d3f3b1c4d]
aws_instance.ohio_ec2: Still destroying... [id=i-06b80cfb5d4e4fd12, 00m10s elapsed]
aws_instance.virginia_ec2: Still destroying... [id=i-044e3008d3f3b1c4d, 00m10s elapsed]
aws_instance.ohio_ec2: Still destroying... [id=i-06b80cfb5d4e4fd12, 00m20s elapsed]
aws_instance.virginia_ec2: Still destroying... [id=i-044e3008d3f3b1c4d, 00m20s elapsed]
aws_instance.ohio_ec2: Still destroying... [id=i-06b80cfb5d4e4fd12, 00m30s elapsed]
aws_instance.virginia_ec2: Still destroying... [id=i-044e3008d3f3b1c4d, 00m30s elapsed]
aws_instance.virginia_ec2: Destruction complete after 31s
aws_instance.ohio_ec2: Destruction complete after 31s

Destroy complete! Resources: 2 destroyed.
root@ip-172-31-15-26:~/terraform_script#
```

2. Create a VPC with the required components using Terraform
3. Deploy an EC2 instance inside the VPC

**Instances (1)** Info

Last updated less than a minute ago ⟳ | Connect | Instance state ▼ | Actions ▼ | **Launch instances** ▼

🔍 Find Instance by attribute or tag (case-sensitive)

Running ▼

‹ 1 › ⚙

| | Name ✎ | ▽ | Instance ID | Instance state | ▽ | Instance type | ▽ | Status check | Alarm status | Availability Zone | ▽ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | simple-ec2 | | i-0ff0c743fb1020876 | ⊘ Running 🔍⊕ 🔍⊖ | | t2.micro | | ⏱ Initializing | View alarms ➕ | us-east-2c | |

**VPCs** | VPC encryption controls – *new*

**Your VPCs (2)** Info

Last updated less than a minute ago ⟳ | Actions ▼ | **Create VPC**

🔍 Find VPCs by attribute or tag

‹ 1 › ⚙

| | Name | ▽ | VPC ID | ▽ | State | ▽ | Encryption c... | ▽ | Encryption control ... | ▽ | Block Publi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | simple-vpc | | vpc-0687bc90634c9cad6 | | ⊘ Available | | – | | – | | ⊖ Off |
| ☐ | – | | vpc-04c71b30a33654126 | | ⊘ Available | | – | | – | | ⊖ Off |

Task-5:
1. Destroy the previous deployments

```
    }

Plan: 0 to add, 0 to change, 7 to destroy.
aws_route_table_association.public_assoc: Destroying... [id=rtbassoc-049f626d8696a0a73]
aws_instance.my_ec2: Destroying... [id=i-0ff0c743fb1020876]
aws_route_table_association.public_assoc: Destruction complete after 1s
aws_route_table.public_rt: Destroying... [id=rtb-0729b3aa1ebf9d89a]
aws_route_table.public_rt: Destruction complete after 2s
aws_internet_gateway.igw: Destroying... [id=igw-0cb4b86ea81dd3ab6]
aws_instance.my_ec2: Still destroying... [id=i-0ff0c743fb1020876, 00m10s elapsed]
aws_internet_gateway.igw: Still destroying... [id=igw-0cb4b86ea81dd3ab6, 00m10s elapsed]
aws_instance.my_ec2: Still destroying... [id=i-0ff0c743fb1020876, 00m20s elapsed]
aws_internet_gateway.igw: Still destroying... [id=igw-0cb4b86ea81dd3ab6, 00m20s elapsed]
aws_instance.my_ec2: Still destroying... [id=i-0ff0c743fb1020876, 00m30s elapsed]
aws_internet_gateway.igw: Still destroying... [id=igw-0cb4b86ea81dd3ab6, 00m30s elapsed]
aws_instance.my_ec2: Destruction complete after 33s
aws_subnet.public: Destroying... [id=subnet-09a06b2abf3a27a05]
aws_security_group.ec2_sg: Destroying... [id=sg-0fe0ffa641f94ef3d]
aws_subnet.public: Destruction complete after 1s
aws_internet_gateway.igw: Destruction complete after 31s
aws_security_group.ec2_sg: Destruction complete after 2s
aws_vpc.main: Destroying... [id=vpc-0687bc90634c9cad6]
aws_vpc.main: Destruction complete after 1s
```

2. Create a script to install Apache2

```
-rw-r--r-- 1 root root 14690 Nov 29 10:57 terraform.tfstate
root@ip-172-31-10-194:~/terrscript# cat apache.sh
#!/bin/bash
apt-get update -y
apt-get install -y apache2
systemctl enable apache2
systemctl start apache2

root@ip-172-31-10-194:~/terrscript# pwd
/root/terrscript
root@ip-172-31-10-194:~/terrscript#
```

i-0edb62e079e60f7fb

PublicIPs: 18.60.226.72   PrivateIPs: 172.31.10.194

3. Run this script on a newly created EC2 instance
4. Print the IP address of the instance in a file on the local once deployed

```
                      to their respective packages, not to the web server itself.
          </p>
        </div>

      </div>
    </div>
    <div class="validator">
    </div>
  </body>
</html>
root@ip-172-31-10-194:~/terrscript# ls -lrt
total 32
-rw-r--r-- 1 root root  1304 Nov 29 10:53 main.tf
-rw-r--r-- 1 root root    43 Nov 29 10:53 provider.tf
-rw-r--r-- 1 root root   107 Nov 29 10:55 apache.sh
-rwxr-xr-x 1 root root    12 Nov 29 10:57 ec2-ip.txt
-rw-r--r-- 1 root root 14690 Nov 29 10:57 terraform.tfstate
root@ip-172-31-10-194:~/terrscript#
```

**i-0edb62e079e60f7fb**

PublicIPs: 18.60.226.72    PrivateIPs: 172.31.10.194

[Option+S]

Account ID: 9404-8240-9885 ▼

United States (Ohio) ▼    Karthick

**Instances (1/1)** Info

Last updated
12 minutes ago

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 Zone | ▽ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☑ | Apache-Server | | i-0c0baec7b89ceb010 | ⊘ Running 🔍 🔍 | | t2.micro | | ⏱ Initializing | View alarms + | us-east-2a | |

```
ubuntu@ip-172-31-4-12:~$ apache --version
Command 'apache' not found, did you mean:
  command 'apache2' from deb apache2-bin (2.4.52-1ubuntu4.16)
Try: sudo apt install <deb name>
ubuntu@ip-172-31-4-12:~$ apache2 --version
[Sat Nov 29 10:59:11.031254 2025] [core:warn] [pid 2748] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 80 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
```