

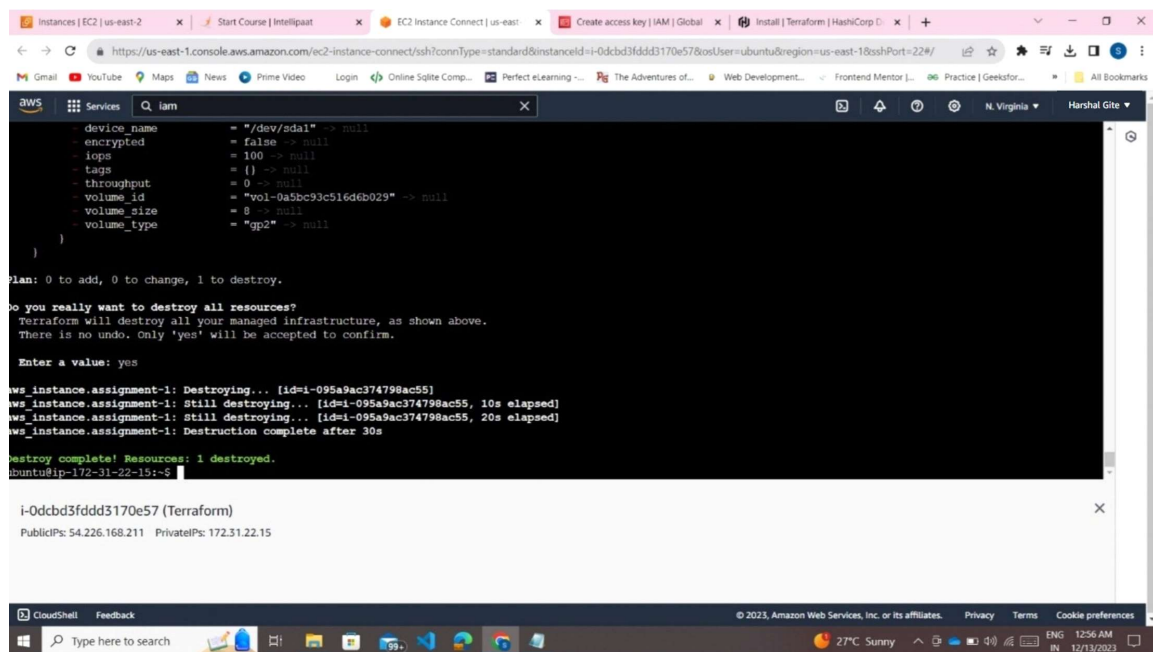
# Terraform Assignment-2

Tasks To Be Performed:

1. Destroy the previous deployment
2. Create a new EC2 instance with an Elastic IP

Solution:

Steps:



The screenshot shows a terminal window in AWS CloudShell. At the top, there are several browser tabs open, including 'Instances | EC2 | us-east-2', 'Start Course | Intellipaat', 'EC2 Instance Connect | us-east', 'Create access key | IAM | Global', and 'Install | Terraform | HashiCorp'. The terminal window displays the output of a Terraform destroy command. It shows the plan for destroying resources, a confirmation prompt 'do you really want to destroy all resources?', and the user's response 'yes'. The terminal then shows the destruction of the EC2 instance 'ws\_instance.assignment-1' and the completion of the process. Below the terminal output, there is a summary of the destroyed resources: 'i-0dcbd3fddd3170e57 (Terraform)' with public and private IP addresses. The bottom of the screenshot shows the Windows taskbar with the search bar and system tray.

```
device_name      = "/dev/sda1" -> null
encrypted        = false -> null
iops             = 100 -> null
tags            = {} -> null
throughput       = 0 -> null
volume_id        = "vol-9a5bc93c516deb029" -> null
volume_size      = 8 -> null
volume_type      = "gp2" -> null
}

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

do you really want to destroy all resources?
Terraform will destroy all your managed infrastructure, as shown above.
There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

ws_instance.assignment-1: Destroying... [id=i-095a9ac374798ac55]
ws_instance.assignment-1: Still destroying... [id=i-095a9ac374798ac55, 10s elapsed]
ws_instance.assignment-1: Still destroying... [id=i-095a9ac374798ac55, 20s elapsed]
ws_instance.assignment-1: Destruction complete after 30s

Destroy complete! Resources: 1 destroyed.
ubuntu@ip-172-31-22-15:~$
```

i-0dcbd3fddd3170e57 (Terraform)  
PublicIPs: 54.226.168.211 PrivateIPs: 172.31.22.15

Instances | EC2 | us-east-2

Start Course | Intellipaat | EC2 Instance Connect | us-east-2 | Create access key | IAM | Global | Install | Terraform | HashiCorp | +

https://us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#Instances:

EC2 Dashboard  
EC2 Global View  
Events  
▼ Instances  
Instances  
Instance Types  
Launch Templates  
Spot Requests  
Savings Plans  
Reserved Instances  
Dedicated Hosts  
Capacity Reservations  
New  
▼ Images  
AMIs  
AMI Catalog  
▼ Elastic Block Store  
Volumes  
Snapshots  
Lifecycle Manager

Instances (1) info

Find Instance by attribute or tag (case-sensitive)

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>	assignment-1	i-095a9ac374798ac55	Terminated	t2.micro	-	No alarms	us-east-2a	-

Select an instance

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27°C Sunny 12:56 AM 12/13/2023

Instances | EC2 | us-east-2

Start Course | Intellipaat | EC2 Instance Connect | us-east-2 | Create access key | IAM | Global | Install | Terraform | HashiCorp | +

https://us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0dcbd3fddd3170e57&osUser=ubuntu&region=us-east-1&sshPort=22#/:

aws

Search iam

GNU nano 4.8 main.tf

```
provider "aws" {
  region = "us-east-2"
  access_key = "AKIARZYTZU2OEDJTMASC"
  secret_key = "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"
}

resource "aws_instance" "assignment-2" {
  ami = "ami-07b36ea99852e96cad"
  instance_type = "t2.micro"
  key_name = "ohio-key"
  tags = {
    Name = "assignment-2"
  }
}

resource "aws_eip" "eip" {
  vpc = true
}

resource "aws_eip_association" "eip_assoc" {
  instance_id = aws_instance.assignment-2.id
  allocation_id = aws_eip.eip.id
}
```

i-0dcbd3fddd3170e57 (Terraform)

PublicIPs: 54.226.168.211 PrivateIPs: 172.31.22.15

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27°C Sunny 1:00 AM 12/13/2023

The screenshot shows the AWS CloudShell interface with a terminal window. The terminal displays the contents of a file named `main.tf`. The configuration defines an AWS provider, an IAM access key, and an EC2 instance named `assignment-2` with an Elastic IP. Below the configuration, the instance ID `i-0dcdb3fddd3170e57` is shown along with its public and private IP addresses.

```
provider "aws" {
  region = "us-east-2"
  access_key = "AKTAR5YTZU2OEDJIMASC"
  secret_key = "8W6cADPQvoo142*Wslj4NFOEJlRLgPao9bTl5FWU"
}

resource "aws_instance" "assignment-2" {
  ami = "ami-07b36ea9852e986ad"
  instance_type = "t2.micro"
  key_name = "ohio-key"
  tags = {
    Name = "assignment-2"
  }
}

resource "aws_eip" "eip" {
  vpc = true
}

resource "aws_eip_association" "eip_assoc" {
  instance_id = aws_instance.assignment-2.id
  allocation_id = aws_eip.eip.id
}
```

i-0dcdb3fddd3170e57 (Terraform)  
PublicIPs: 54.226.168.211 PrivateIPs: 172.31.22.15

The screenshot shows the AWS CloudShell interface with a terminal window. The terminal displays the output of the `terraform destroy` command, which successfully destroys the EC2 instance. It then shows the output of the `terraform init` command, which initializes the Terraform working directory.

```
aws_instance.assignment-1: Destroying... [id=i-095a9ac374798ac55]
aws_instance.assignment-1: Still destroying... [id=i-095a9ac374798ac55, 10s elapsed]
aws_instance.assignment-1: Still destroying... [id=i-095a9ac374798ac55, 20s elapsed]
aws_instance.assignment-1: Destruction complete after 30s

Destroy complete! Resources: 1 destroyed.
ibuntu@ip-172-31-22-15:~$ sudo nano main.tf
ibuntu@ip-172-31-22-15:~$ terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v5.30.0

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
ibuntu@ip-172-31-22-15:~$
```

i-0dcdb3fddd3170e57 (Terraform)  
PublicIPs: 54.226.168.211 PrivateIPs: 172.31.22.15

Instance details | EC2 | us-east-2 | Start Course | Intellipaat | EC2 Instance Connect | us-east-2 | Create access key | IAM | Global | Install | Terraform | HashiCorp | +

https://us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0dcdbd3fddd3170e57&osUser=ubuntu&region=us-east-1&sshPort=22#/

Gmail YouTube Maps News Prime Video Login Online Sgite Comp... Perfect eLearning... The Adventures of... Web Development... Frontend Mentor... Practice | Geeksfor... All Bookmarks

aws Services Search iam

Terraform will perform the actions described above.  
Only 'yes' will be accepted to approve.

Enter a value: yes

```
ws_instance.assignment-2: Creating...
ws_eip.eip: Creating...
ws_instance.assignment-2: Creation complete after 1s [id=eiपालloc-00a517fd22217596d]
ws_instance.assignment-2: Still creating... [10s elapsed]
ws_instance.assignment-2: Still creating... [20s elapsed]
ws_instance.assignment-2: Still creating... [30s elapsed]
ws_instance.assignment-2: Creation complete after 32s [id=i-0c8ca37da500b12ab]
ws_eip.association.eip_assoc: Creating...
ws_eip.association.eip_assoc: Creation complete after 1s [id=eiपassoc-0467cf5b5df47912a]
```

Warning: Argument is deprecated

```
with aws_eip.eip,
on main.tf line 15, in resource "aws_eip" "eip":
15:   vpc = true

use domain attribute instead
```

Apply complete! Resources: 3 added, 0 changed, 0 destroyed.

ubuntuip-172-31-22-15:~\$

i-0dcdbd3fddd3170e57 (Terraform)

PublicIPs: 54.226.166.211 PrivateIPs: 172.31.22.15

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Type here to search

Instances | EC2 | us-east-2 | Start Course | Intellipaat | EC2 Instance Connect | us-east-2 | Create access key | IAM | Global | Install | Terraform | HashiCorp | +

https://us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#instances:

Gmail YouTube Maps News Prime Video Login Online Sgite Comp... Perfect eLearning... The Adventures of... Web Development... Frontend Mentor... Practice | Geeksfor... All Bookmarks

aws Services Search [Alt+S]

EC2 Dashboard EC2 Global View Events

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

New

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Instances (2) Info

Find Instance by attribute or tag (case-sensitive)

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
<input type="checkbox"/>	assignment-2	i-0c8ca37da500b12ab	Running	t2.micro	2/2 checks passed	No alarms	us-east-2c	ec2-3-136-
<input type="checkbox"/>	assignment-1	i-095a9ac374798ac55	Terminated	t2.micro	-	No alarms	us-east-2a	-

Select an instance

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Type here to search

Browser tabs: Elastic IP addresses | EC2 | us-east-2 | Start Course | Intellipaat | EC2 Instance Connect | us-east-2 | Create access key | IAM | Global | Install | Terraform | HashiCorp |

Address bar: <https://us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#Addresses:>

Navigation bar: AWS Services Search [Alt+5] Ohio Harshal Gite

Left sidebar:

- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations
- New
- Images
  - AMIs
  - AMI Catalog
- Elastic Block Store
  - Volumes
  - Snapshots
  - Lifecycle Manager
- Network & Security
  - Security Groups
  - Elastic IPs**
  - Placement Groups
  - Key Pairs
  - Network Interfaces
- Load Balancing

Main content: Elastic IP addresses (1/1)

Filter: Elastic IP addresses

<input checked="" type="checkbox"/>	Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
<input checked="" type="checkbox"/>	-	3.136.35.249	Public IP	eipalloc-00a517fd22217596d	-

View IP address usage and recommendations to release unused IPs with Public IP insights

3.136.35.249

Summary Tags

Summary

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Taskbar: Type here to search 27°C Sunny 12/13/2023 12:24 AM