

Unit 5.5A Graded Assignment:

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Daily Assignment :

Prepare a simple configuration to create an AWS S3 bucket with id set to "name-surname-bucket", and output this id to a screen. Provide commands to create and erase this resource.

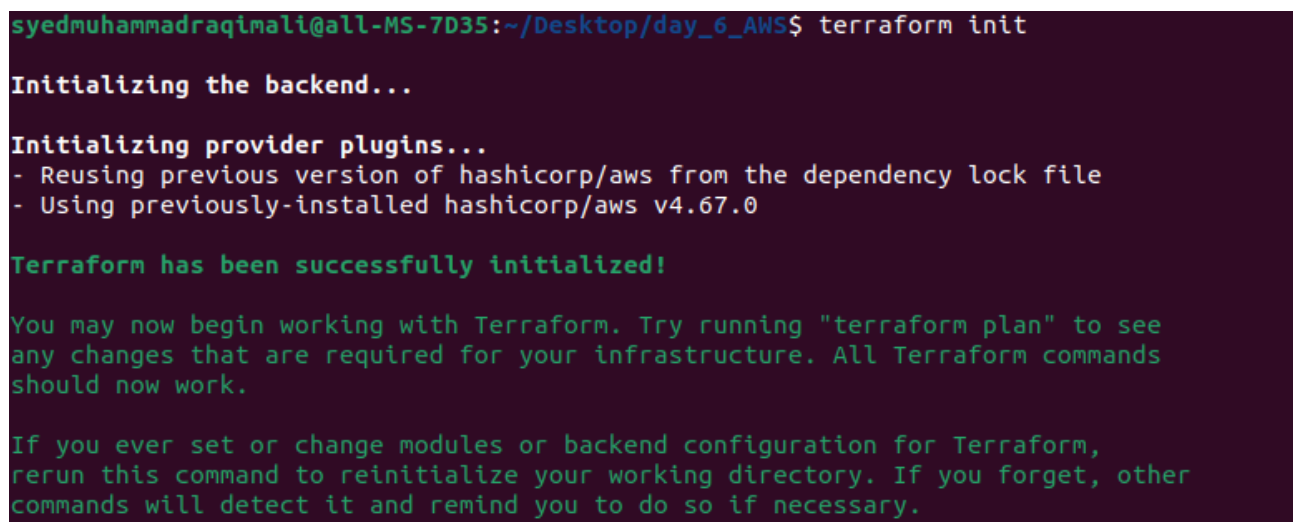
Answer:



```
1 terraform {
2   required_providers {
3     aws = {
4       source  = "hashicorp/aws"
5       version = "~> 4.39"
6     }
7   }
8 }
9 required_version = ">= 1.2.0"
10 }
11
12 provider "aws" {
13   region = "eu-central-1"
14 }
15
16 resource "aws_s3_bucket" "my_bucket" {
17   bucket = "muhammad-raqim-bucket" # Replace with your desired bucket name
18   acl    = "private"              # Set the bucket access control list (ACL) to private
19 }
20
21 output "bucket_id" {
22   value = aws_s3_bucket.my_bucket.id
23 }
24
```

The terraform block specifies the required version of Terraform and the required providers, it requires the AWS provider from hashicorp with a version constraint of "~> 4.39". The provider block configures the AWS provider with the specified AWS region. The resource block defines the creation of an AWS S3 bucket using the specified bucket name and ACL. The output block defines an output variable named "bucket_id" that will display the ID of the created bucket when running Terraform commands.

Terraform init



```
syedmuhammadrqimali@all-MS-7D35:~/Desktop/day_6_AWS$ terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v4.67.0

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.
```

Terraform apply

```
syedmuhammadraqimali@all-MS-7D35:~/Desktop/day_6_AWS$ terraform apply

Terraform used the selected providers to generate the following execution plan.
Resource actions are indicated with the following symbols:
  + create

Terraform will perform the following actions:

# aws_s3_bucket.my_bucket will be created
+ resource "aws_s3_bucket" "my_bucket" {
  + acceleration_status = (known after apply)
  + acl                 = "private"
  + arn                 = (known after apply)
  + bucket              = "muhammad-raqim-bucket"
  + bucket_domain_name = (known after apply)
  + bucket_prefix       = (known after apply)
  + bucket_regional_domain_name = (known after apply)
  + force_destroy       = false
  + hosted_zone_id      = (known after apply)
  + id                  = (known after apply)
  + object_lock_enabled = (known after apply)
  + policy              = (known after apply)
  + region              = (known after apply)
  + request_payer       = (known after apply)
  + tags_all            = (known after apply)
  + website_domain      = (known after apply)
  + website_endpoint    = (known after apply)
}

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

Changes to Outputs:
  + bucket_id = (known after apply)

Warning: Argument is deprecated

  with aws_s3_bucket.my_bucket,
  on main.tf line 18, in resource "aws_s3_bucket" "my_bucket":
   18:   acl      = "private"           # Set the bucket access control list (ACL) to private

Use the aws_s3_bucket_acl resource instead

(and one more similar warning elsewhere)

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_s3_bucket.my_bucket: Creating...
aws_s3_bucket.my_bucket: Creation complete after 3s [id=muhammad-raqim-bucket]

Warning: Argument is deprecated

  with aws_s3_bucket.my_bucket,
```

```
aws_s3_bucket.my_bucket: Creating...
aws_s3_bucket.my_bucket: Creation complete after 3s [id=muhammad-raqim-bucket]

Warning: Argument is deprecated

  with aws_s3_bucket.my_bucket,
  on main.tf line 18, in resource "aws_s3_bucket" "my_bucket":
   18:   acl      = "private"           # Set the bucket access control list (ACL) to private

Use the aws_s3_bucket_acl resource instead

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

Outputs:

bucket_id = "muhammad-raqim-bucket"
syedmuhammadraqimali@all-MS-7D35:~/Desktop/day_6_AWS$
```

Created Bucket

The screenshot shows the AWS S3 console interface. On the left is a navigation menu with options like Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Block Public Access settings, Storage Lens, and AWS Organizations settings. The main content area is titled 'Amazon S3' and contains an 'Account snapshot' section with a 'View Storage Lens dashboard' button. Below this is a table showing account metrics: Total storage (1.5 KB), Object count (8), and Average object size (196.5 B). A note indicates that advanced metrics can be enabled in the 'default-account-dashboard' configuration. The 'Buckets (2)' section includes a search bar and a table of buckets. The table has columns for Name, AWS Region, Access, and Creation date. Two buckets are listed: 'muhammad-raqim-bucket' in EU (Frankfurt) eu-central-1 and 'raqim-module5-days5' in US East (N. Virginia) us-east-1. Both have 'Bucket and objects not public' access.

Name	AWS Region	Access	Creation date
muhammad-raqim-bucket	EU (Frankfurt) eu-central-1	Bucket and objects not public	May 19, 2023, 15:57:16 (UTC+05:00)
raqim-module5-days5	US East (N. Virginia) us-east-1	Bucket and objects not public	May 18, 2023, 12:43:30 (UTC+05:00)

Terraform destroy

```
bucket_id = "muhammad-raqim-bucket"
syedmuhammadraqimali@all-MS-7D35:~/Desktop/day_6_AWS$ terraform destroy
aws_s3_bucket.my_bucket: Refreshing state... [id=muhammad-raqim-bucket]

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_s3_bucket.my_bucket will be destroyed
- resource "aws_s3_bucket" "my_bucket" {
  - acl                  = "private" -> null
  - arn                 = "arn:aws:s3:::muhammad-raqim-bucket" -> null
  - bucket              = "muhammad-raqim-bucket" -> null
  - bucket_domain_name  = "muhammad-raqim-bucket.s3.amazonaws.com" -> null
  - bucket_regional_domain_name = "muhammad-raqim-bucket.s3.eu-central-1.amazonaws.com" -> null
  - force_destroy       = false -> null
  - hosted_zone_id      = "Z21DNDOUULTQW6Q" -> null
  - id                  = "muhammad-raqim-bucket" -> null
  - object_lock_enabled = false -> null
  - region              = "eu-central-1" -> null
  - request_payer       = "BucketOwner" -> null
  - tags                = {} -> null
  - tags_all            = {} -> null

  - grant {
    - id          = "1be2c3be156dc8eb8c23cd6f02d8976e36f08dd48da94c8417d448585c6154ef" -> null
    - permissions = [
      - "FULL_CONTROL",
    ] -> null
    - type        = "CanonicalUser" -> null
  }

  - server_side_encryption_configuration {
    - rule {
      - bucket_key_enabled = false -> null

      - apply_server_side_encryption_by_default {
        - sse_algorithm = "AES256" -> null
      }
    }
  }

  - versioning {
    - enabled      = false -> null
    - mfa_delete  = false -> null
  }
}

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

Changes to Outputs:
- bucket_id = "muhammad-raqim-bucket" -> null

Warning: Argument is deprecated
```

Warning: Argument is deprecated

```
with aws_s3_bucket.my_bucket,  
on main.tf line 18, in resource "aws_s3_bucket" "my_bucket":  
18:   acl      = "private"           # Set the bucket access control list (ACL) to private
```

Use the aws_s3_bucket_acl resource instead

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

aws_s3_bucket.my_bucket: Destroying... [id=muhammad-raqim-bucket]

aws_s3_bucket.my_bucket: Destruction complete after 1s

Destroy complete! Resources: 1 destroyed.

syedmuhammadrqimali@all-MS-7D35:~/Desktop/day_6_AWS\$

Buckets (1) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

	Name ▲	AWS Region ▼	Access ▼
<input type="radio"/>	raqim-module5-day5	US East (N. Virginia) us-east-1	<u>Bucket and objects not public</u>