ASSIGNMENT 5.5A

on

Infrastructure as code

Submitted by:

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Solution:

Created private S3 bucket named faiza-gulzar-bucket.

```
main.tf    ×

  main.tf
  1    terraform {
  2      required_providers {
  3        aws = {
  4          source  = "hashicorp/aws"
  5          version = ">= 3.20.0"
  6        }
  7      }
  8    }
  9
 10    provider "aws" {
 11      region  = "us-east-1"
 12      }
 13
 14    resource "aws_s3_bucket" "s3_data" {
 15        bucket = "faiza-gulzar-bucket"
 16        acl = "private"
 17    }
 18
 19
 20
 21    output "faiza-gulzar-bucket" {
 22      value = aws_s3_bucket.s3_data.id
 23
 24    }
 25
 26
 27
 28
```

Commands to run above main.tf to create bucket.

```
faiza-gulzar-bucket = "assignment-bucket-0"
faizakiyani@all-MS-7D35:~/Documents/Assignment_5.5a$ 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.
faizakiyani@all-MS-7D35:~/Documents/Assignment_5.5a$ terraform output
```
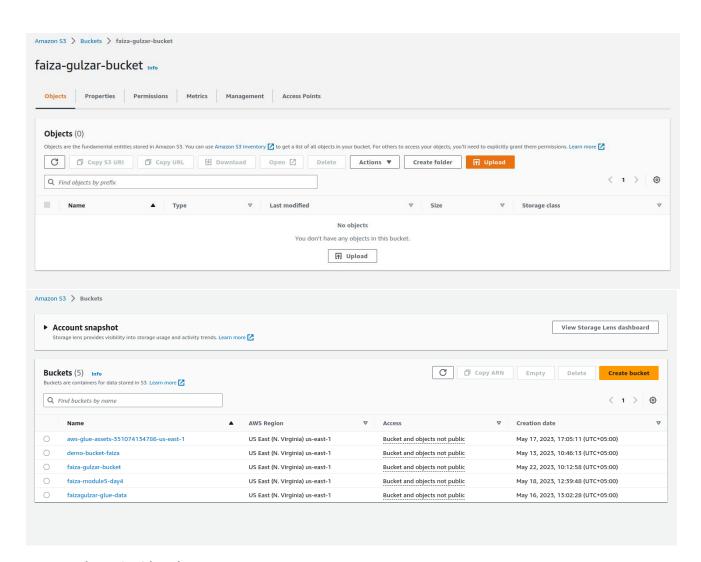
```
faiza-gulzar-bucket = "assignment-bucket-0"
faizakiyani@all-MS-7D35:~/Documents/Assignment_5.5a$ terraform apply
aws_s3_bucket.s3_data: Refreshing state... [id=assignment-bucket-0]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following
-/+ destroy and then create replacement

Terraform will perform the following actions:

  # aws_s3_bucket.s3_data must be replaced
-/+ resource "aws_s3_bucket" "s3_data" {
      + acceleration_status         = (known after apply)
      ~ arn                         = "arn:aws:s3:::assignment-bucket-0" -> (known after apply)
      ~ bucket                      = "assignment-bucket-0" -> "faiza-gulzar-bucket" # forces replacement
      ~ bucket_domain_name          = "assignment-bucket-0.s3.amazonaws.com" -> (known after apply)
      + bucket_prefix               = (known after apply)
      ~ bucket_regional_domain_name = "assignment-bucket-0.s3.amazonaws.com" -> (known after apply)
      ~ hosted_zone_id              = "Z3AQBSTGFYJSTF" -> (known after apply)
      ~ id                          = "assignment-bucket-0" -> (known after apply)
      ~ object_lock_enabled         = false -> (known after apply)
      + policy                      = (known after apply)
      ~ region                      = "us-east-1" -> (known after apply)
      ~ request_payer               = "BucketOwner" -> (known after apply)
      - tags                        = {} -> null
      ~ tags_all                    = {} -> (known after apply)
      + website_domain              = (known after apply)
      + website_endpoint            = (known after apply)
        # (2 unchanged attributes hidden)
```

Bucket is successfully created on AWS.

faiza-gulzar-bucket Info

Objects | Properties | Permissions | Metrics | Management | Access Points

Objects (0)

Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory ☐ to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more ☐

| C | Copy S3 URI | Copy URL | Download | Open ☐ | Delete | Actions ▼ | Create folder | Upload |

Find objects by prefix

< 1 > ⚙

	Name ▲	Type ▽	Last modified ▽	Size ▽	Storage class ▽

No objects

You don't have any objects in this bucket.

Upload

▶ **Account snapshot**

Storage lens provides visibility into storage usage and activity trends. Learn more ☐

View Storage Lens dashboard

Buckets (5) Info

Buckets are containers for data stored in S3. Learn more ☐

| C | Copy ARN | Empty | Delete | **Create bucket** |

Find buckets by name

< 1 > ⚙

	Name ▲	AWS Region ▽	Access ▽	Creation date ▽
○	aws-glue-assets-351074134786-us-east-1	US East (N. Virginia) us-east-1	Bucket and objects not public	May 17, 2023, 17:05:11 (UTC+05:00)
○	demo-bucket-faiza	US East (N. Virginia) us-east-1	Bucket and objects not public	May 13, 2023, 10:46:13 (UTC+05:00)
○	faiza-gulzar-bucket	US East (N. Virginia) us-east-1	Bucket and objects not public	May 22, 2023, 10:12:58 (UTC+05:00)
○	faiza-module5-day4	US East (N. Virginia) us-east-1	Bucket and objects not public	May 18, 2023, 12:39:48 (UTC+05:00)
○	faizagulzar-glue-data	US East (N. Virginia) us-east-1	Bucket and objects not public	May 16, 2023, 13:02:28 (UTC+05:00)

Command to print id to the output

```
faiza-gulzar-bucket = "faiza-gulzar-bucket"
faizakiyani@all-MS-7D35:~/Documents/Assignment_5.5a$ terraform output
faiza-gulzar-bucket = "faiza-gulzar-bucket"
faizakiyani@all-MS-7D35:~/Documents/Assignment_5.5a$
```

Command to erase the bucket resources

```
faiza-gulzar-bucket = faiza-gulzar-bucket
faizakiyani@all-MS-7D35:~/Documents/Assignment_5.5a$ terraform destroy
aws_s3_bucket.s3_data: Refreshing state... [id=faiza-gulzar-bucket]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following
  - destroy

Terraform will perform the following actions:

  # aws_s3_bucket.s3_data will be destroyed
  - resource "aws_s3_bucket" "s3_data" {
      - acl                         = "private" -> null
      - arn                         = "arn:aws:s3:::faiza-gulzar-bucket" -> null
      - bucket                      = "faiza-gulzar-bucket" -> null
      - bucket_domain_name          = "faiza-gulzar-bucket.s3.amazonaws.com" -> null
      - bucket_regional_domain_name = "faiza-gulzar-bucket.s3.amazonaws.com" -> null
      - force_destroy               = false -> null
      - hosted_zone_id              = "Z3AQBSTGFYJSTF" -> null
      - id                          = "faiza-gulzar-bucket" -> null
      - object_lock_enabled         = false -> null
      - region                      = "us-east-1" -> null
      - request_payer               = "BucketOwner" -> null
      - tags                        = {} -> null
      - tags_all                    = {} -> null

      - grant {
          - id          = "80404e471e11fd066e32eae7f7106c2fc1239e358c509144e6e030a87a2fa7a3" -> null
          - permissions = [
              - "FULL_CONTROL",
            ] -> null
          - type        = "CanonicalUser" -> null
        }
```

All logs of apply and destory saved in txt files in current directory.