UNIT 5.5(A) GRADED ASSIGNMENT

Group members

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Task:

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.

Solution:

main.tf:

```
terraform {
  required_providers {
    aws = {
      source  = "hashicorp/aws"
      version = "~> 4.39"
    }
  }

  required_version = ">= 1.2.0"
}

provider "aws" {
  region = "us-east-1"
}

variable "bucket_name" {
  description = "Name of the S3 bucket"
}

resource "aws_s3_bucket" "my_bucket" {
  bucket = var.bucket_name
  acl    = "private"
}

output "s3_bucket" {
  value = aws_s3_bucket.my_bucket.id
}
```

In the above file, we are simply creating a bucket. When we write terraform apply, it will first ask for the bucket name because we didn't give bucket name in the file and then it will print the bucket id.

```
C:\Users\asdd\Documents\Assignment-5a>terraform init

Initializing the backend...

Initializing provider plugins...
- Finding hashicorp/aws versions matching "~> 4.39"...
- Installing hashicorp/aws v4.67.0...
- Installed hashicorp/aws v4.67.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

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.
```

```
C:\Users\asdd\Documents\Assignment-5a>terraform apply
var.bucket_name
  Name of the S3 bucket

  Enter a value: ifra-saleem-bucket


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                      = "ifra-saleem-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:
  + s3_bucket = (known after apply)
```

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

Changes to Outputs:
  + s3_bucket = (known after apply)

  Warning: Argument is deprecated

    with aws_s3_bucket.my_bucket,
    on main.tf line 22, in resource "aws_s3_bucket" "my_bucket":
    22:   acl    = "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 7s [id=ifra-saleem-bucket]

  Warning: Argument is deprecated

    with aws_s3_bucket.my_bucket,
    on main.tf line 22, in resource "aws_s3_bucket" "my_bucket":
    22:   acl    = "private"

  Use the aws_s3_bucket_acl resource instead


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

Outputs:

s3_bucket = "ifra-saleem-bucket"
```

```
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s3_bucket = "ifra-saleem-bucket"
```

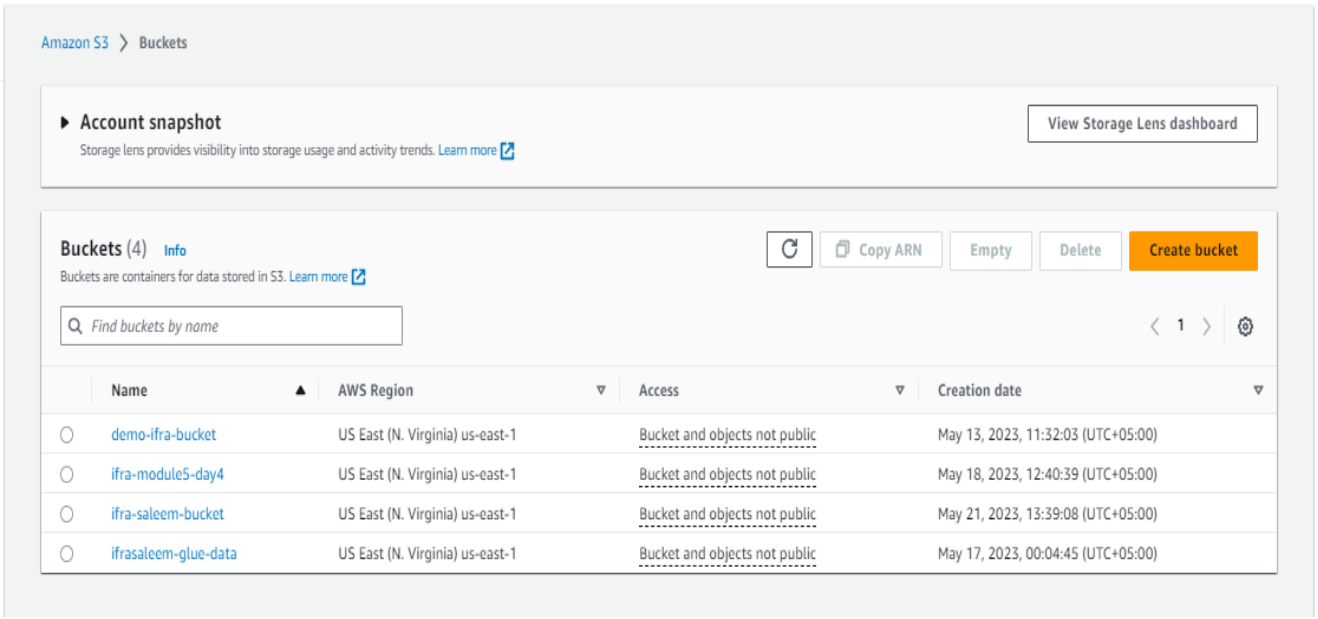

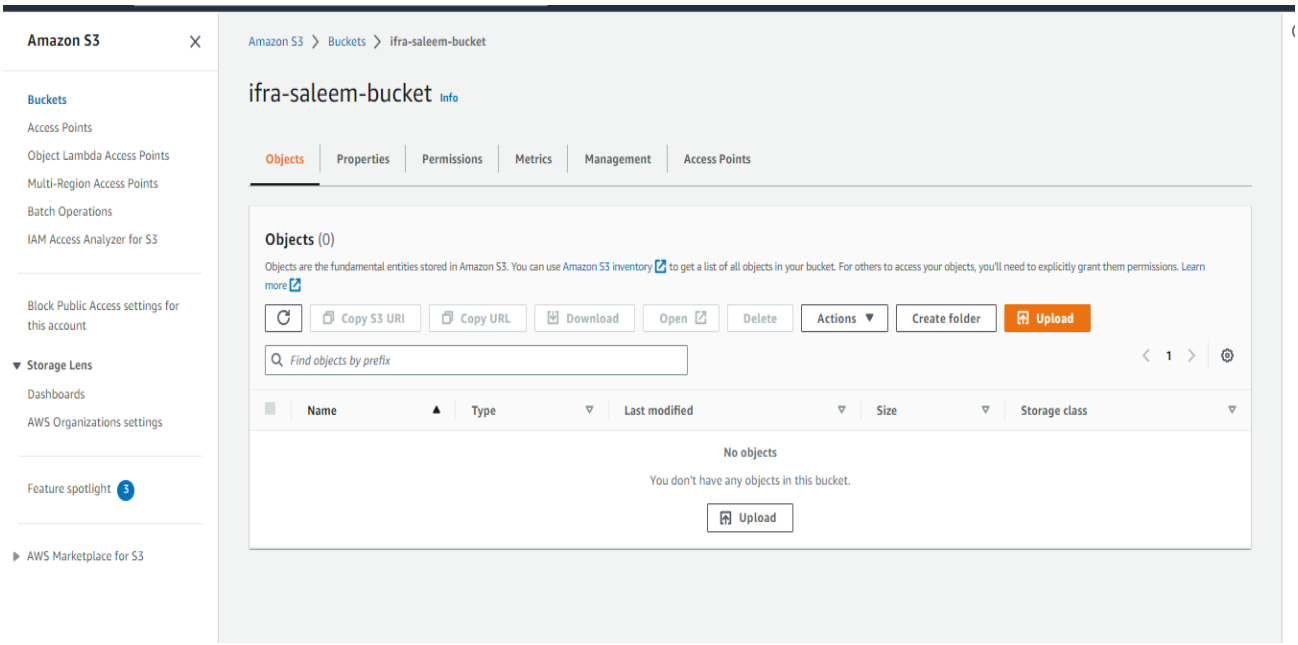


```
C:\Users\asdd\Documents\Assignment-5a>terraform destroy
var.bucket_name
  Name of the S3 bucket

  Enter a value: ifra-saleem-bucket

aws_s3_bucket.my_bucket: Refreshing state... [id=ifra-saleem-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:::ifra-saleem-bucket" -> null
      - bucket                      = "ifra-saleem-bucket" -> null
      - bucket_domain_name          = "ifra-saleem-bucket.s3.amazonaws.com" -> null
      - bucket_regional_domain_name = "ifra-saleem-bucket.s3.amazonaws.com" -> null
      - force_destroy               = false -> null
      - hosted_zone_id              = "Z3AQBSTGFYJSTF" -> null
      - id                          = "ifra-saleem-bucket" -> null
      - object_lock_enabled         = false -> null
      - region                      = "us-east-1" -> null
      - request_payer               = "BucketOwner" -> null
      - tags                        = {} -> null
      - tags_all                    = {} -> null

      - grant {
          - id          = "9007ff2813131a5f15604d0538dbd7c5919a102a7168534a625d0af0456f6b7c" -> null
          - permissions = [
              - "FULL_CONTROL",
            ] -> null
          - type        = "CanonicalUser" -> null
        }

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

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

Changes to Outputs:
  - s3_bucket = "ifra-saleem-bucket" -> null

 Warning: Argument is deprecated

   with aws_s3_bucket.my_bucket,
   on main.tf line 22, in resource "aws_s3_bucket" "my_bucket":
   22:   acl    = "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=ifra-saleem-bucket]
aws_s3_bucket.my_bucket: Destruction complete after 2s

Destroy complete! Resources: 1 destroyed.
```