

**Name: - Muhammad Huzaifa Waseem (2303-KHI-DEG-021)**

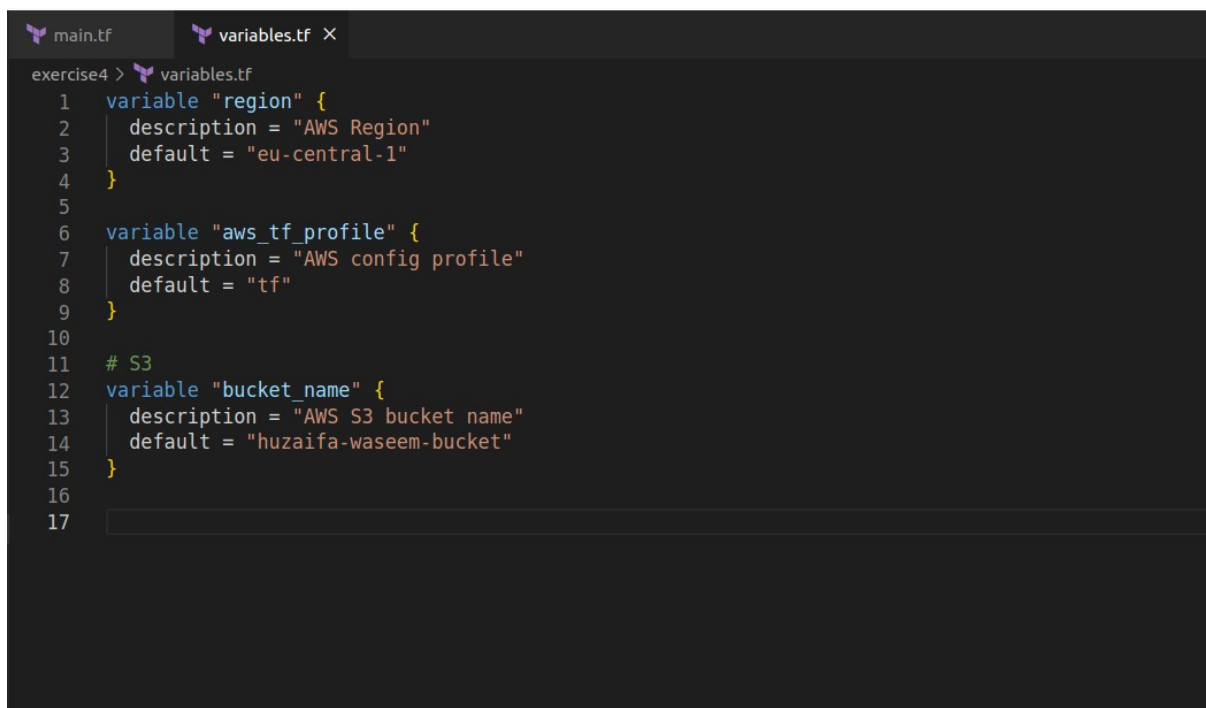
**Pair Partner 1: - Muhammad Faizan Rafique (2303.005.KHI.DEG)**

**Pair Partner 2: - Syed Muhammad Hammad  
Irshad(2303.KHI.DEG.032)**

**UNIT 5.5 a:**

## 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.



```
main.tf variables.tf X
exercise4 > variables.tf
1  variable "region" {
2      description = "AWS Region"
3      default = "eu-central-1"
4  }
5
6  variable "aws_tf_profile" {
7      description = "AWS config profile"
8      default = "tf"
9  }
10
11 # S3
12 variable "bucket_name" {
13     description = "AWS S3 bucket name"
14     default = "huzaifa-waseem-bucket"
15 }
16
17
```

```
main.tf x variables.tf
exercise4 > 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   profile = var.aws_tf_profile
12   region = var.region
13 }
14
15 resource "aws_s3_bucket" "s3_data" {
16   bucket = var.bucket_name
17 }
18
19 output "s3-bucket-id" {
20   value = aws_s3_bucket.s3_data.id
21 }
```

Provide commands to create and erase this resource.

```
PROBLEMS 9 OUTPUT DEBUG CONSOLE TERMINAL
• muhammadhuzaifawaseem@all-MS-7D35:~/Desktop/day_5_IaC/exercise4$ 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.
• muhammadhuzaifawaseem@all-MS-7D35:~/Desktop/day_5_IaC/exercise4$ 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.s3_data will be created
+ resource "aws_s3_bucket" "s3_data" {
+   acceleration_status = (known after apply)
+   acl                 = (known after apply)
+   arn                 = (known after apply)
+   bucket              = "huzaiifa-waseem-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)
}

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

Changes to Outputs:
+ s3-bucket-id = (known after apply)

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.s3_data: Creating...
aws_s3_bucket.s3_data: Creation complete after 4s [id=huzaiifa-waseem-bucket]

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

Outputs:
s3-bucket-id = "huzaiifa-waseem-bucket"
• muhammadhuzaifawaseem@all-MS-7D35:~/Desktop/day_5_IaC/exercise4$
```

```
PROBLEMS 9 OUTPUT DEBUG CONSOLE TERMINAL
● muhammadhuzaiyawaseem@all-MS-7035:~/Desktop/day_5_IaC/exercise4$ terraform destroy
aws_s3_bucket.s3_data: Refreshing state... [id=huzaiifa-waseem-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.s3_data will be destroyed
- resource "aws_s3_bucket" "s3_data" {
  - arn                = "arn:aws:s3:::huzaiifa-waseem-bucket" -> null
  - bucket             = "huzaiifa-waseem-bucket" -> null
  - bucket_domain_name = "huzaiifa-waseem-bucket.s3.amazonaws.com" -> null
  - bucket_regional_domain_name = "huzaiifa-waseem-bucket.s3.eu-central-1.amazonaws.com" -> null
  - force_destroy      = false -> null
  - hosted_zone_id     = "Z2IDNDVULTOW6Q" -> null
  - id                = "huzaiifa-waseem-bucket" -> null
  - object_lock_enabled = false -> null
  - region            = "eu-central-1" -> null
  - request_payer      = "BucketOwner" -> null
  - tags              = {} -> null
  - tags_all          = {} -> null

  - grant {
    - id          = "cdc0168fe70ceal4bdc3acdb4f42ad201261090569a9813c72057ce986f579f5" -> 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
      }
    }
  }
}

- grant {
  - id          = "cdc0168fe70ceal4bdc3acdb4f42ad201261090569a9813c72057ce986f579f5" -> 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:
- s3-bucket-id = "huzaiifa-waseem-bucket" -> null

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.s3_data: Destroying... [id=huzaiifa-waseem-bucket]
aws_s3_bucket.s3_data: Destruction complete after 1s

Destroy complete! Resources: 1 destroyed.
● muhammadhuzaiyawaseem@all-MS-7035:~/Desktop/day_5_IaC/exercise4$
```

output:

| Buckets (1) <a href="#">Info</a>   |                        |                             |                               |                                    |   | Copy ARN | Empty | Delete | Create bucket |
|--|------------------------|-----------------------------|-------------------------------|------------------------------------|---|----------|-------|--------|---------------|
| Buckets are containers for data stored in S3. <a href="#">Learn more</a> |                        |                             |                               |                                    | <input type="text" value="Find buckets by name"/> |          |       |        |               |
|  |                        |                             |                               |                                    | < 1 >   |          |       |        |               |
|  | Name                   | AWS Region                  | Access                        | Creation date                      |   |          |       |        |               |
| <input type="radio"/>  | huzaiifa-waseem-bucket | EU (Frankfurt) eu-central-1 | Bucket and objects not public | May 22, 2023, 13:33:06 (UTC+05:00) |   |          |       |        |               |