

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

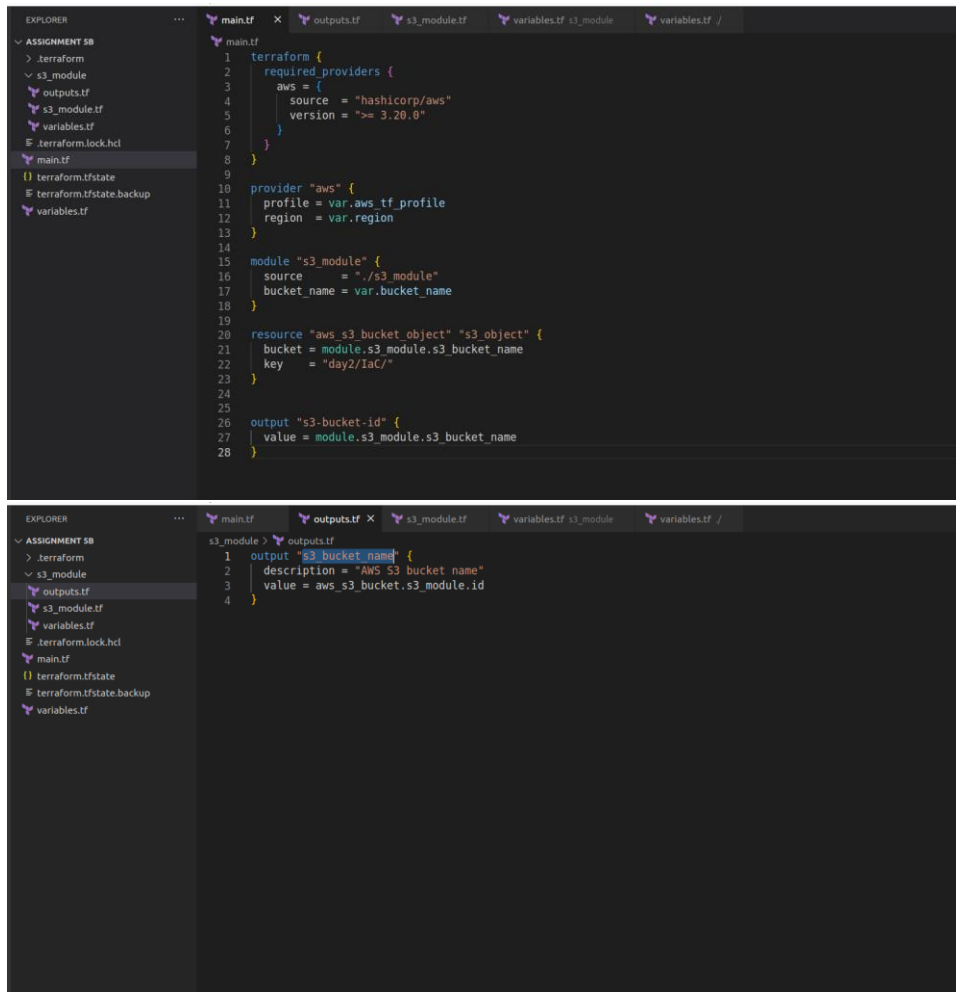
Pair Partner 1: - Muhammad Faizan Rafique (2303.005.KHI.DEG)

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

UNIT 5.5 b:

Assignment

Make a module of yesterday's task, name it "s3_module". Pass bucket name to the module using variable "bucket_name". Use the returned "s3_bucket" variable to add "day2/laC/" directory to this bucket in the main module.



The image displays two screenshots of a Terraform IDE interface, showing the implementation of an s3_module and its integration into a main module.

Top Screenshot (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 module "s3_module" {
16   source      = "../s3_module"
17   bucket_name = var.bucket_name
18 }
19
20 resource "aws_s3_bucket_object" "s3 object" {
21   bucket = module.s3_module.s3_bucket_name
22   key    = "day2/laC/"
23 }
24
25
26 output "s3-bucket-id" {
27   value = module.s3_module.s3_bucket_name
28 }
```

Bottom Screenshot (s3_module/outputs.tf):

```
1 output "s3_bucket_name" {
2   description = "AWS S3 bucket name"
3   value       = aws_s3_bucket.s3_module.id
4 }
```

The Explorer pane on the left shows the project structure, including terraform, s3_module, outputs.tf, s3_module.tf, variables.tf, and terraform.lock.hcl.

EXPLORER

- ASSIGNMENT 5B
 - terraform
 - s3_module
 - outputs.tf
 - s3_module.tf
 - variables.tf
 - terraform.lock.hcl
 - main.tf
 - terraform.tfstate
 - terraform.tfstate.backup
 - variables.tf

main.tf

s3_module > s3_module.tf

```
1 resource "aws_s3_bucket" "s3_module" {
2   bucket = var.bucket_name
3 }
```

EXPLORER

- ASSIGNMENT 5B
 - terraform
 - s3_module
 - outputs.tf
 - s3_module.tf
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 - terraform.lock.hcl
 - main.tf
 - terraform.tfstate
 - terraform.tfstate.backup
 - variables.tf

main.tf

s3_module > variables.tf

```
1 variable "bucket_name" {
2   description = "AWS S3 bucket name"
3   default = "huzaifa-s3"
4 }
```

EXPLORER

- ASSIGNMENT 5B
 - terraform
 - s3_module
 - outputs.tf
 - s3_module.tf
 - variables.tf
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 - main.tf
 - terraform.tfstate
 - terraform.tfstate.backup
 - variables.tf

main.tf

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 }
```

```
EXPLORER  PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

ASSIGNMENT 5B
├── terraform
├── s3_module
│   ├── outputs.tf
│   ├── s3_module.tf
│   ├── variables.tf
│   ├── terraform.lock.hcl
│   ├── main.tf
│   ├── terraform.tfstate
│   ├── terraform.tfstate.backup
│   └── variables.tf
├── terraform.lock.hcl
├── main.tf
├── terraform.tfstate
├── terraform.tfstate.backup
└── variables.tf

> OUTLINE
> TIMELINE

muhammadhuzaiyawaseem@all-MS-7D35:~/Desktop/assignment 5b$ terraform apply

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

Terraform will perform the following actions:

# aws_s3_bucket_object.s3_object will be created
+ resource "aws_s3_bucket_object" "s3_object" {
+   acl                = "private"
+   bucket              = (known after apply)
+   bucket_key_enabled = (known after apply)
+   content_type        = (known after apply)
+   etag                = (known after apply)
+   force_destroy       = false
+   id                  = (known after apply)
+   key                 = "day2/IaC/"
+   kms_key_id          = (known after apply)
+   server_side_encryption = (known after apply)
+   storage_class        = (known after apply)
+   tags_all            = (known after apply)
+   version_id          = (known after apply)
}

# module.s3_module.aws_s3_bucket.s3_module will be created
+ resource "aws_s3_bucket" "s3_module" {
+   acceleration_status = (known after apply)
+   acl                 = (known after apply)
+   arn                 = (known after apply)
+   bucket              = "huzaiya-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)
+   tags_all            = (known after apply)
+   website_domain      = (known after apply)
+   website_endpoint    = (known after apply)
}

# module.s3_module.aws_s3_bucket.s3_module will be created
+ resource "aws_s3_bucket" "s3_module" {
+   acceleration_status = (known after apply)
+   acl                 = (known after apply)
+   arn                 = (known after apply)
+   bucket              = "huzaiya-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)
+   tags_all            = (known after apply)
+   website_domain      = (known after apply)
+   website_endpoint    = (known after apply)
}

Plan: 2 to add, 0 to change, 0 to destroy.

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

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.

Outputs:
s3-bucket-id = "huzaiya-waseem-bucket"
muhammadhuzaiyawaseem@all-MS-7D35:~/Desktop/assignment 5b$
```

Output

Buckets (1) [Info](#)

Refresh

Copy ARN

Empty

Delete

Create bucket

Find buckets by name

< 1 >

⚙

	Name	AWS Region	Access	Creation date
<input type="radio"/>	huzaiya-waseem-bucket	EU (Frankfurt) eu-central-1	Bucket and objects not public	May 22, 2023, 15:08:03 (UTC+05:00)

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](#)

Refresh

Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder

Upload

Find objects by prefix

< 1 >

⚙

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	day2/	Folder	-	-	-

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