Here’s an example Terraform code to create an S3 bucket and upload an object to it:

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### \*\*Terraform Code\*\*

\*\*`variables.tf`\*\*

```hcl

variable "bucket\_name" {

description = "The name of the S3 bucket to be created"

default = "my-unique-s3-bucket-name" # Replace with your unique bucket name

}

variable "region" {

description = "AWS region for the S3 bucket"

default = "us-east-1"

}

variable "file\_path" {

description = "Path to the file to be uploaded to the S3 bucket"

default = "./test-file.txt" # Replace with your file path

}

```

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\*\*`main.tf`\*\*

```hcl

provider "aws" {

region = var.region

}

# Create S3 Bucket

resource "aws\_s3\_bucket" "my\_bucket" {

bucket = var.bucket\_name

acl = "private"

tags = {

Name = var.bucket\_name

Environment = "Dev"

}

}

# Upload Object to S3 Bucket

resource "aws\_s3\_object" "uploaded\_object" {

bucket = aws\_s3\_bucket.my\_bucket.bucket

key = "uploaded-object.txt" # Name of the object in the bucket

source = var.file\_path # Local file to upload

acl = "private"

}

```

---

\*\*`outputs.tf`\*\*

```hcl

output "bucket\_name" {

value = aws\_s3\_bucket.my\_bucket.bucket

description = "Name of the S3 bucket created"

}

output "object\_url" {

value = aws\_s3\_object.uploaded\_object.id

description = "URL of the uploaded object in the S3 bucket"

}

```

---

### \*\*Step-by-Step Instructions\*\*

1. \*\*Prepare Your Local Environment:\*\*

- Create a file named `test-file.txt` in the same directory as your Terraform files or use your own file.

- Ensure the file path matches the `file\_path` variable value in `variables.tf`.

2. \*\*Initialize Terraform:\*\*

```bash

terraform init

```

3. \*\*Preview Changes:\*\*

```bash

terraform plan

```

4. \*\*Apply the Configuration:\*\*

```bash

terraform apply

```

- Confirm the operation by typing `yes` when prompted.

5. \*\*Verify Resources:\*\*

- Go to the \*\*AWS Management Console > S3\*\* and check if the bucket is created.

- Inside the bucket, confirm that the file is uploaded with the name `uploaded-object.txt`.

6. \*\*Access Outputs:\*\*

- The `terraform apply` command will display the S3 bucket name and the URL of the uploaded object.

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### \*\*Notes:\*\*

1. \*\*Unique Bucket Name:\*\* S3 bucket names must be globally unique. Update the `bucket\_name` variable with a unique name before running the code.

2. \*\*File Path:\*\* Ensure the file specified in the `file\_path` variable exists on your local machine.

3. \*\*Permissions:\*\* Ensure your AWS credentials allow `s3:CreateBucket` and `s3:PutObject` actions.

Let me know if you need further assistance!