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BATCH 2

Lab Exercise 10– Creating an AWS RDS Instance in Terraform Objective:

Learn how to use Terraform to create an AWS RDS instance.

Steps:

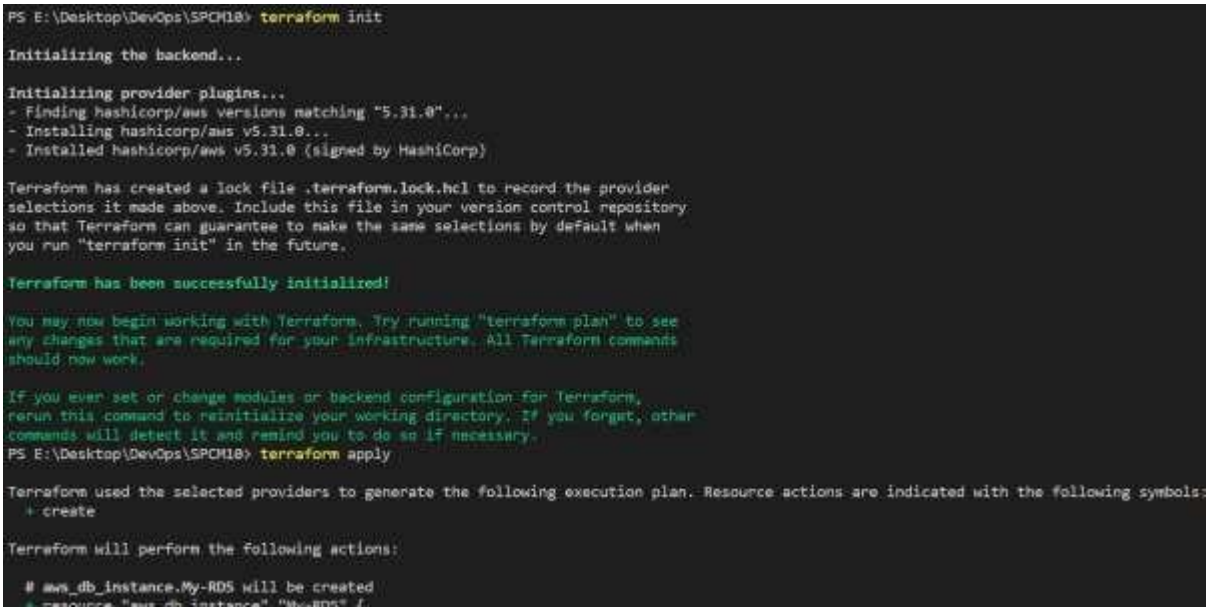
1. Create a Terraform Directory:

2. Create Terraform Configuration Files:

rds.tf > ...

```
resource "aws_db_instance" "My-RDS" {
    allocated_storage = 10
    db_name = "upesdb"
    engine = "mysql"
    engine_version = "5.7"
    instance_class = "db.t2.micro"
    username = "admin"
    password = "admin1234"
    parameter_group_name = "default.mysql5.7"
    skip_final_snapshot = true
    publicly_accessible = true
}
```

3. Initialize and Apply:



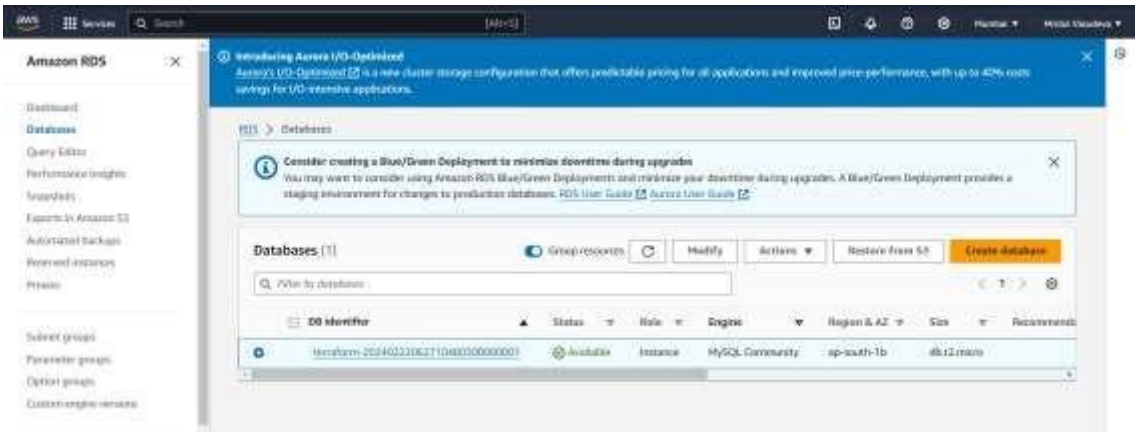
```
PS E:\Desktop\DevOps\SPCM10> terraform apply

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

Terraform will perform the following actions:

  # aws_db_instance.My-RDS will be created
  + resource "aws_db_instance" "My-RDS" {
      + address                               = (known after apply)
      + allocated_storage                     = 10
      + apply_immediately                     = false
      + arn                                   = (known after apply)
      + auto_minor_version_upgrade            = true
      + availability_zone                     = (known after apply)
      + backup_retention_period               = (known after apply)
      + backup_target                         = (known after apply)
      + backup_window                         = (known after apply)
      + ca_cert_identifier                    = (known after apply)
      + character_set_name                    = (known after apply)
      + copy_tags_to_snapshot                 = false
      + db_name                               = "upesdb"
      + db_subnet_group_name                  = (known after apply)
      + delete_automated_backups              = true
      + endpoint                              = (known after apply)
      + engine                                = "mysql"
      + engine_version                        = "5.7"
      + engine_version_actual                 = (known after apply)
      + hosted_zone_id                        = (known after apply)
      + id                                    = (known after apply)
      + identifier                            = (known after apply)
      + identifier_prefix                     = (known after apply)
```

4. Verify RDS Instance in AWS Console:



Clean Up:

```
PS E:\Desktop\DevOps\SPCM10> terraform destroy
aws_db_instance.My-RDS: Refreshing state... [id=db-5776FH337F2W5HBEU2TMEMZATY]

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

Terraform will perform the following actions:

  # aws_db_instance.My-RDS will be destroyed
  - resource "aws_db_instance" "My-RDS" {
      - address                               = "terraform-20240222062710480300000001.cz0ckenka6up.ap-south-1.rds.amazonaws.com" -> null
      - allocated_storage                     = 10 -> null
      - apply_immediately                     = false -> null
      - arn                                   = "arn:aws:rds:ap-south-1:637423583821:db:terraform-20240222062710480300000001" -> null
      - auto_minor_version_upgrade            = true -> null
      - availability_zone                     = "ap-south-1b" -> null
      - backup_retention_period               = 0 -> null
      - backup_target                         = "region" -> null
      - backup_window                         = "18:36-19:06" -> null
      - ca_cert_identifier                    = "rds-ca-rsa2048-g1" -> null
      - copy_tags_to_snapshot                 = false -> null
      - customer_owned_ip_enabled             = false -> null
      - db_name                               = "upesdb" -> null
      - db_subnet_group_name                  = "default" -> null
      - delete_automated_backups              = true -> null
      - deletion_protection                   = false -> null
      - enabled_cloudwatch_logs_exports       = [] -> null
      - endpoint                              = "terraform-20240222062710480300000001.cz0ckenka6up.ap-south-1.rds.amazonaws.com:3306" ->
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      - engine                                = "mysql" -> null
      - engine_version                        = "5.7" -> null
      - engine_version_actual                 = "5.7.44" -> null
```