

SUBMITTED BY: Pranay Mayal, B2 (NON HONS.)

Lab Exercise 8– Creating a VPC in Terraform Objective:

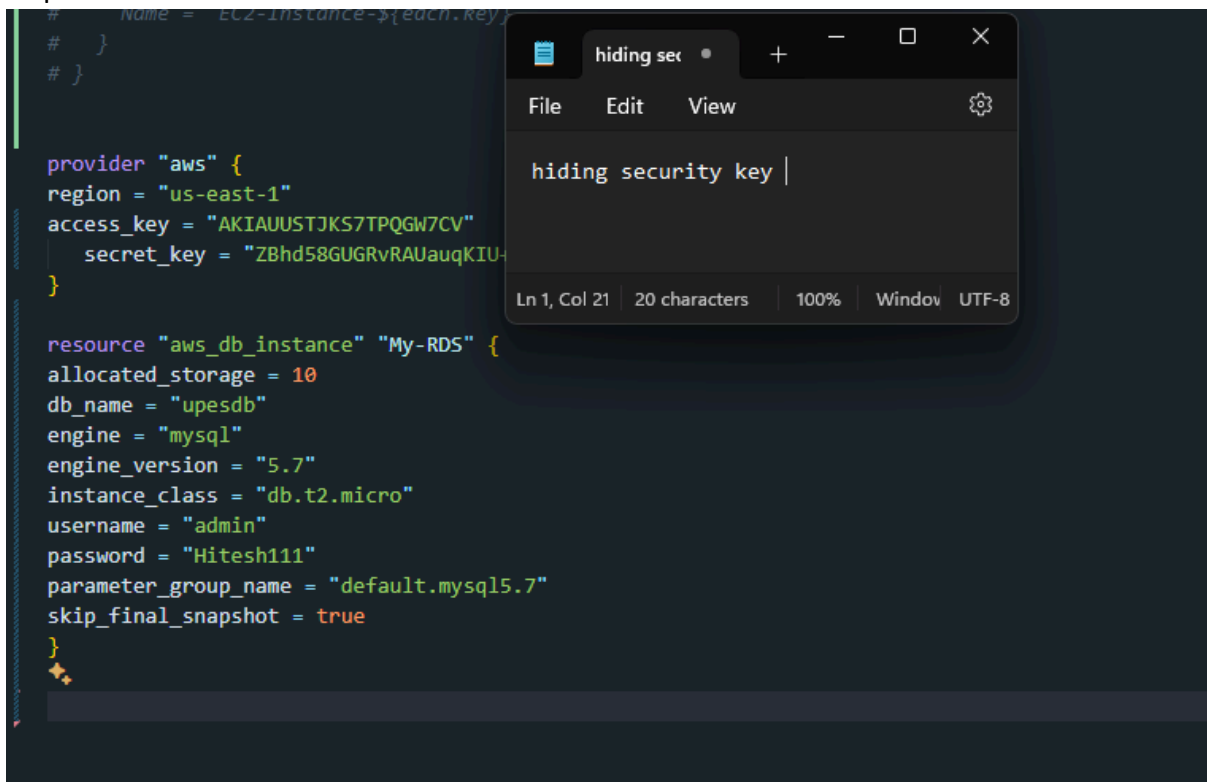
Objective:

Learn how to use Terraform to create a basic Virtual Private Cloud (VPC) in AWS.

Prerequisites:

- Terraform installed on your machine.
- AWS CLI configured with the necessary credentials.

Step 1 Create main.tf



```
# Name = EC2-Instance-${each.key}
# }
# }

provider "aws" {
  region = "us-east-1"
  access_key = "AKIAUUSTJKS7TPQGW7CV"
  secret_key = "ZBhd58GUGRvRAUauqKIU-"
}

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 = "Hitesh111"
  parameter_group_name = "default.mysql5.7"
  skip_final_snapshot = true
}
```

The screenshot shows a code editor with Terraform configuration. A separate window titled 'hiding security key' is open, showing the text 'hiding security key |'. The status bar at the bottom of the code editor indicates 'Ln 1, Col 21 | 20 characters | 100% | Window | UTF-8'.

Step 2

```
PS D:\Sem 6 DevOps\SPOM\Lab\My Lab Files and PDFS\aws-terraform-demo> terraform plan
```

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_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)
  + instance_class                        = "db.t2.micro"
  + iops                                  = (known after apply)
  + kms_key_id                           = (known after apply)
  + latest_restorable_time                 = (known after apply)
  + license_model                         = (known after apply)
  + listener_endpoint                     = (known after apply)
  + maintenance_window                   = (known after apply)
  + master_user_secret                    = (known after apply)
  + master_user_secret_kms_key_id         = (known after apply)
  + monitoring_interval                   = 0
  + monitoring_role_arn                   = (known after apply)
  + multi_az                             = (known after apply)
  + nchar_character_set_name              = (known after apply)
  + network_type                          = (known after apply)
  + option_group_name                     = (known after apply)
  + parameter_group_name                  = "default.mysql5.7"
  + password                              = (sensitive value)
```

```
PS D:\Sem 6 DevOps\SPCM\Lab\My Lab Files and PDFS\aws-terraform-demo> terraform plan
```

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_db_instance.My-RDS will be created
+ resource "aws_db_instance" "My-RDS" {
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  + apply_immediately             = false
  + arn                          = (known after apply)
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  + availability_zone             = (known after apply)
  + backup_retention_period       = (known after apply)
  + backup_target                 = (known after apply)
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  + ca_cert_identifier            = (known after apply)
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  + endpoint                     = (known after apply)
  + engine                       = "mysql"
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```