

**School of Computer Science**  
**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**DEHRADUN, UTTARAKHAND**



**System Provisioning and  
Configuration Management**

**Lab File (2021-2025)**  
**6<sup>th</sup> Semester**

*Submitted To:*

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Sharma***

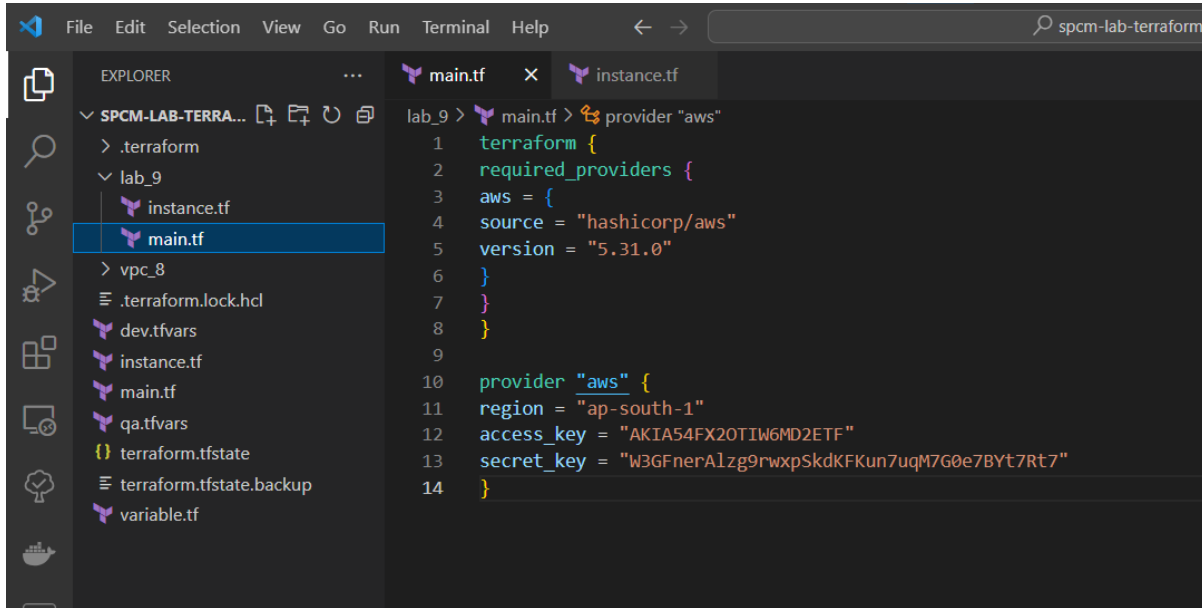
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R2142210350  
Batch - 1**

# LAB EXERCISE 9

## Aim: Creating Multiple EC2 Instances with for each in Terraform

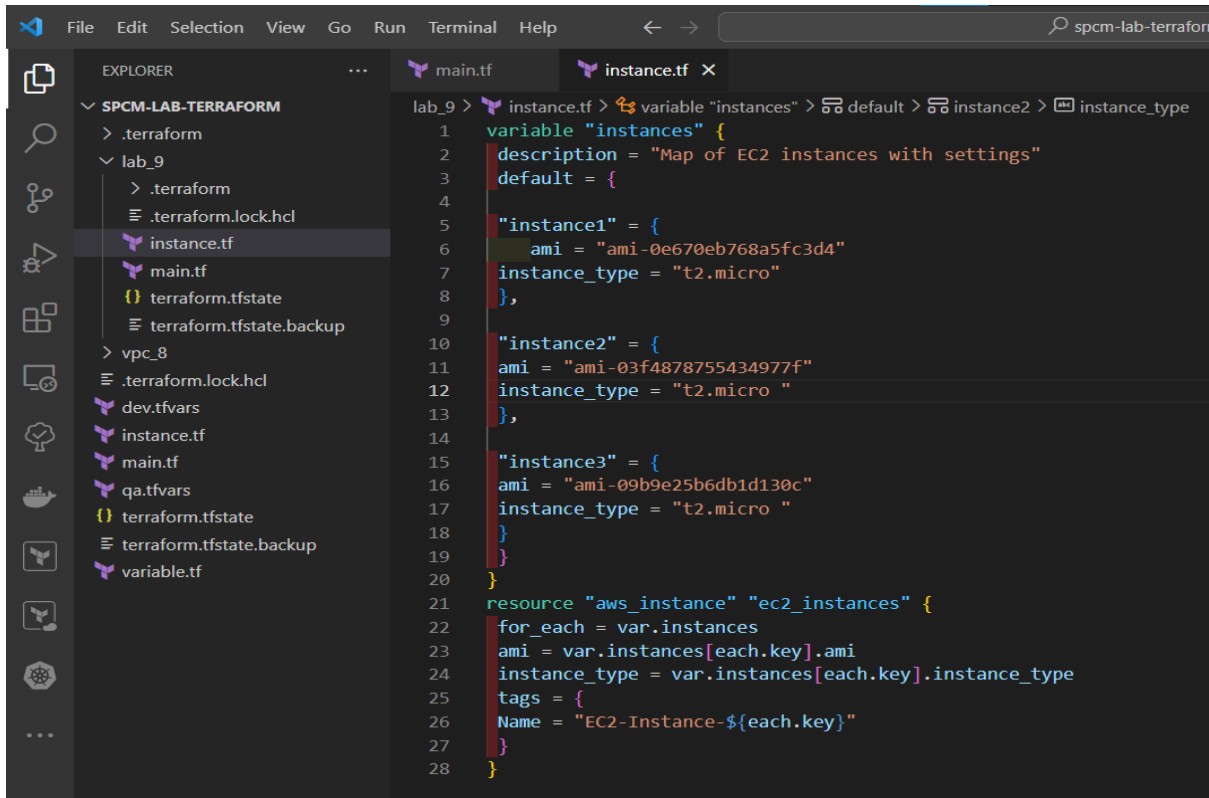
Step 1: Create a main.tf file



The screenshot shows the Visual Studio Code editor with the Explorer sidebar on the left. The Explorer shows a project structure with a folder 'lab\_9' containing files like 'instance.tf', 'main.tf', 'vpc\_8', 'terraform.lock.hcl', 'dev.tfvars', 'instance.tf', 'main.tf', 'qa.tfvars', 'terraform.tfstate', 'terraform.tfstate.backup', and 'variable.tf'. The 'main.tf' file is selected and its content is displayed in the main editor area. The code defines the Terraform provider 'aws' with the following configuration:

```
lab_9 > main.tf > provider "aws"
1 terraform {
2   required_providers {
3     aws = {
4       source = "hashicorp/aws"
5       version = "5.31.0"
6     }
7   }
8 }
9
10 provider "aws" {
11   region = "ap-south-1"
12   access_key = "AKIA54FX20TIW6MD2ETF"
13   secret_key = "W3GFnerAlzg9rwxpSkdKFKun7uqM7G0e7BYt7Rt7"
14 }
```

Step 2: Create a instance.tf file



The screenshot shows the Visual Studio Code editor with the Explorer sidebar on the left. The Explorer shows the same project structure as before, but now the 'instance.tf' file is selected. The 'main.tf' file is also visible in the Explorer. The 'instance.tf' file content is displayed in the main editor area. The code defines a variable 'instances' and a resource 'aws\_instance' 'ec2\_instances' using a 'for\_each' loop. The variable 'instances' is defined as follows:

```
lab_9 > instance.tf > variable "instances" > default > instance2 > instance_type
1 variable "instances" {
2   description = "Map of EC2 instances with settings"
3   default = {
4
5     "instance1" = {
6       ami = "ami-0e670eb768a5fc3d4"
7       instance_type = "t2.micro"
8     },
9
10    "instance2" = {
11      ami = "ami-03f4878755434977f"
12      instance_type = "t2.micro "
13    },
14
15    "instance3" = {
16      ami = "ami-09b9e25b6db1d130c"
17      instance_type = "t2.micro "
18    }
19  }
20 }
21 resource "aws_instance" "ec2_instances" {
22   for_each = var.instances
23   ami = var.instances[each.key].ami
24   instance_type = var.instances[each.key].instance_type
25   tags = {
26     Name = "EC2-Instance-${each.key}"
27   }
28 }
```

Step 3: Now run terraform init command to Initialize.

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4046]
(c) Microsoft Corporation. All rights reserved.

F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_9>terraform init

Initializing the backend...

Initializing provider plugins...
- Finding hashicorp/aws versions matching "5.31.0"...
- Installing hashicorp/aws v5.31.0...
- Installed hashicorp/aws v5.31.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

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.

F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_9>
```

Step 4: Now run the terraform validate command to check if any error is present or not.

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_9>terraform validate
Success! The configuration is valid.

F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_9>
```

Step 5: Now run terraform plan command.

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_9>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_instance.ec2_instances["instance1"] will be created
+ resource "aws_instance" "ec2_instances" {
  + ami                = "ami-0e670eb768a5fc3d4"
  + arn                = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone   = (known after apply)
  + cpu_core_count     = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop    = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized       = (known after apply)
  + get_password_data   = false
  + host_id             = (known after apply)
  + host_resource_group_arn = (known after apply)
  + iam_instance_profile = (known after apply)
  + id                 = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_lifecycle  = (known after apply)
  + instance_state      = (known after apply)
  + instance_type       = "t2.micro"
  + ipv6_address_count  = (known after apply)
  + ipv6_addresses     = (known after apply)
  + key_name            = (known after apply)
  + monitoring          = (known after apply)
  + outpost_arn         = (known after apply)
  + password_data       = (known after apply)
  + placement_group     = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns         = (known after apply)
  + private_ip          = (known after apply)
  + public_dns          = (known after apply)
  + public_ip           = (known after apply)
  + secondary_private_ips = (known after apply)
  + security_groups     = (known after apply)
  + source_dest_check   = true
  + spot_instance_request_id = (known after apply)
  + subnet_id           = (known after apply)
  + tags                = {
```

C:\Windows\System32\cmd.exe

```
+ subnet_id                = (known after apply)
+ tags                     = {
  + "Name" = "EC2-Instance-instance1"
}
+ tags_all                 = {
  + "Name" = "EC2-Instance-instance1"
}
+ tenancy                  = (known after apply)
+ user_data                = (known after apply)
+ user_data_base64        = (known after apply)
+ user_data_replace_on_change = false
+ vpc_security_group_ids   = (known after apply)
}

# aws_instance.ec2_instances["instance2"] will be created
+ resource "aws_instance" "ec2_instances" {
  + ami                = "ami-03f4878755434977f"
  + arn                = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone   = (known after apply)
  + cpu_core_count      = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop    = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized       = (known after apply)
  + get_password_data   = false
  + host_id             = (known after apply)
  + host_resource_group_arn = (known after apply)
  + iam_instance_profile = (known after apply)
  + id                  = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_lifecycle  = (known after apply)
  + instance_state      = (known after apply)
  + instance_type       = "t2.micro "
  + ipv6_address_count   = (known after apply)
  + ipv6_addresses      = (known after apply)
  + key_name             = (known after apply)
  + monitoring           = (known after apply)
  + outpost_arn          = (known after apply)
  + password_data        = (known after apply)
  + placement_group      = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns          = (known after apply)
  + private_ip           = (known after apply)
  + public_dns           = (known after apply)
  + public_ip            = (known after apply)
  + secondary_private_ips = (known after apply)
  + security_groups      = (known after apply)
  + source_dest_check     = true
```

C:\Windows\System32\cmd.exe

```
+ tags = {
  + "Name" = "EC2-Instance-instance2"
}
+ tags_all = {
  + "Name" = "EC2-Instance-instance2"
}
+ tenancy = (known after apply)
+ user_data = (known after apply)
+ user_data_base64 = (known after apply)
+ user_data_replace_on_change = false
+ vpc_security_group_ids = (known after apply)
}

# aws_instance.ec2_instances["instance3"] will be created
+ resource "aws_instance" "ec2_instances" {
  + ami = "ami-09b9e25b6db1d130c"
  + arn = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone = (known after apply)
  + cpu_core_count = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized = (known after apply)
  + get_password_data = false
  + host_id = (known after apply)
  + host_resource_group_arn = (known after apply)
  + iam_instance_profile = (known after apply)
  + id = (known after apply)
  + instance_initiated_shutdown_behavior = (known after apply)
  + instance_lifecycle = (known after apply)
  + instance_state = (known after apply)
  + instance_type = "t2.micro "
  + ipv6_address_count = (known after apply)
  + ipv6_addresses = (known after apply)
  + key_name = (known after apply)
  + monitoring = (known after apply)
  + outpost_arn = (known after apply)
  + password_data = (known after apply)
  + placement_group = (known after apply)
  + placement_partition_number = (known after apply)
  + primary_network_interface_id = (known after apply)
  + private_dns = (known after apply)
  + private_ip = (known after apply)
  + public_dns = (known after apply)
  + public_ip = (known after apply)
  + secondary_private_ips = (known after apply)
  + security_groups = (known after apply)
  + source_dest_check = true
  + spot_instance_request_id = (known after apply)
```

```
    + user_data                = (known after apply)
    + user_data_base64         = (known after apply)
    + user_data_replace_on_change = false
    + vpc_security_group_ids    = (known after apply)
  }
```

Plan: 3 to add, 0 to change, 0 to destroy.

---

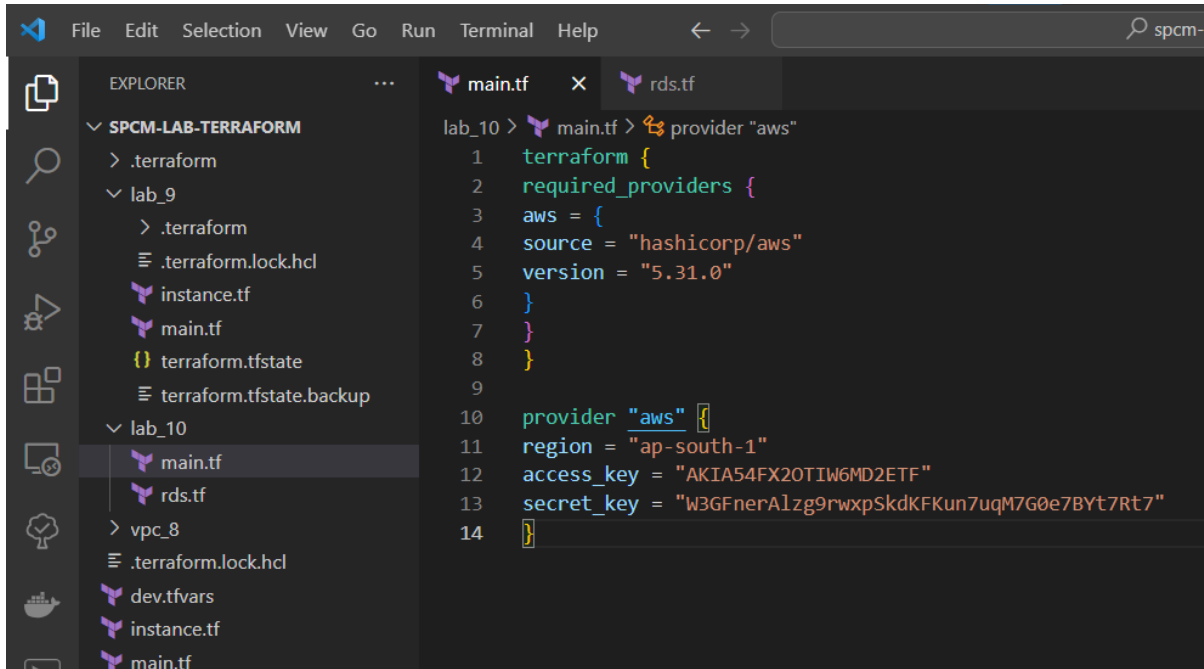
Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you run "terraform apply" now.

F:\sem 6\SPCM\_LAB\spcm-lab-terraform\lab\_9>\_

# LAB EXERCISE 10

## Aim: Creating an AWS RDS Instance in Terraform

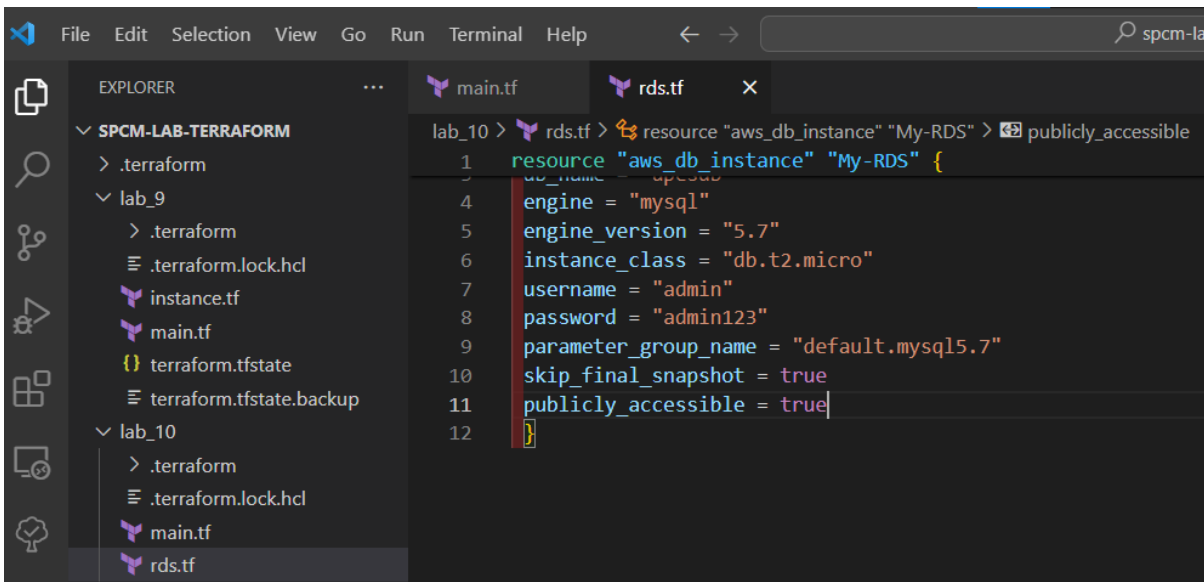
Step 1: Create a main.tf file



The screenshot shows a Visual Studio Code editor with a file explorer on the left and a code editor on the right. The file explorer shows a project structure with folders for lab\_9 and lab\_10, and files for main.tf and rds.tf. The code editor shows the content of main.tf, which is a Terraform configuration for the AWS provider.

```
lab_10 > main.tf > provider "aws"
1 terraform {
2   required_providers {
3     aws = {
4       source = "hashicorp/aws"
5       version = "5.31.0"
6     }
7   }
8 }
9
10 provider "aws" {
11   region = "ap-south-1"
12   access_key = "AKIA54FX20TIW6MD2ETF"
13   secret_key = "W3GFnerAlzg9rwxpSkdKFKun7uqM7G0e7BYt7Rt7"
14 }
```

Step 2: Create a rds.tf file



The screenshot shows a Visual Studio Code editor with a file explorer on the left and a code editor on the right. The file explorer shows a project structure with folders for lab\_9 and lab\_10, and files for main.tf and rds.tf. The code editor shows the content of rds.tf, which is a Terraform configuration for an AWS RDS instance.

```
lab_10 > rds.tf > resource "aws_db_instance" "My-RDS" > publicly_accessible
1 resource "aws_db_instance" "My-RDS" {
2   db_name = "My-RDS"
3   engine = "mysql"
4   engine_version = "5.7"
5   instance_class = "db.t2.micro"
6   username = "admin"
7   password = "admin123"
8   parameter_group_name = "default.mysql5.7"
9   skip_final_snapshot = true
10  publicly_accessible = true
11 }
12 }
```

Step 3: Now run terraform init command to Initialize.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.4046]
(c) Microsoft Corporation. All rights reserved.

F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>terraform init

Initializing the backend...

Initializing provider plugins...
- Finding hashicorp/aws versions matching "5.31.0"...
- Installing hashicorp/aws v5.31.0...
- Installed hashicorp/aws v5.31.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

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.

F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>
```

Step 4: Now run the terraform validate command to check if any error is present or not.

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>terraform validate
Success! The configuration is valid.

F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>_
```

Step 5: Now run terraform plan command.

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>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)
```

```
  + performance_insights_enabled = false
  + performance_insights_kms_key_id = (known after apply)
  + performance_insights_retention_period = (known after apply)
  + port                          = (known after apply)
  + publicly_accessible          = true
  + replica_mode                 = (known after apply)
  + replicas                     = (known after apply)
  + resource_id                  = (known after apply)
  + skip_final_snapshot          = true
  + snapshot_identifier          = (known after apply)
  + status                       = (known after apply)
  + storage_throughput           = (known after apply)
  + storage_type                 = (known after apply)
  + tags_all                     = (known after apply)
  + timezone                     = (known after apply)
  + username                     = "admin"
  + vpc_security_group_ids       = (known after apply)
}
```

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

Note: You didn't use the -out option to save this plan, so Terraform can

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>_
```

Step 6: Now run the terraform apply command to apply the rds.

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>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\_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)
```

```
C:\Windows\System32\cmd.exe
```

```
+ network_type                = (known after apply)  
+ option_group_name           = (known after apply)  
+ parameter_group_name        = "default.mysql5.7"  
+ password                    = (sensitive value)  
+ performance_insights_enabled = false  
+ performance_insights_kms_key_id = (known after apply)  
+ performance_insights_retention_period = (known after apply)  
+ port                        = (known after apply)  
+ publicly_accessible         = true  
+ replica_mode                = (known after apply)  
+ replicas                    = (known after apply)  
+ resource_id                 = (known after apply)  
+ skip_final_snapshot         = true  
+ snapshot_identifier         = (known after apply)  
+ status                      = (known after apply)  
+ storage_throughput          = (known after apply)  
+ storage_type                = (known after apply)  
+ tags_all                    = (known after apply)  
+ timezone                   = (known after apply)  
+ username                    = "admin"  
+ vpc_security_group_ids      = (known after apply)  
}
```

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

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

```

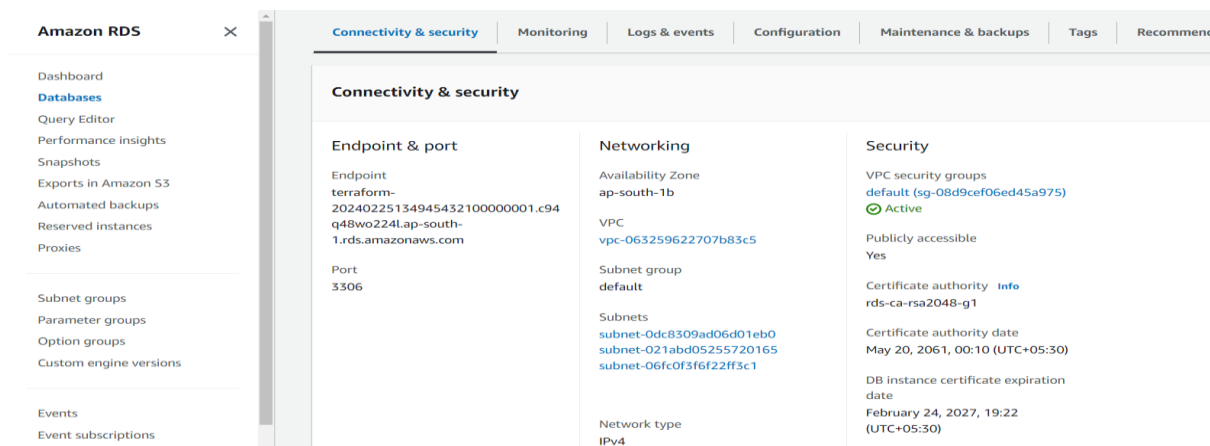
aws_db_instance.My-RDS: Creating...
aws_db_instance.My-RDS: Still creating... [10s elapsed]
aws_db_instance.My-RDS: Still creating... [20s elapsed]
aws_db_instance.My-RDS: Still creating... [30s elapsed]
aws_db_instance.My-RDS: Still creating... [40s elapsed]
aws_db_instance.My-RDS: Still creating... [50s elapsed]
aws_db_instance.My-RDS: Still creating... [1m0s elapsed]
aws_db_instance.My-RDS: Still creating... [1m10s elapsed]
aws_db_instance.My-RDS: Still creating... [1m20s elapsed]
aws_db_instance.My-RDS: Still creating... [1m30s elapsed]
aws_db_instance.My-RDS: Still creating... [1m40s elapsed]
aws_db_instance.My-RDS: Still creating... [1m51s elapsed]
aws_db_instance.My-RDS: Still creating... [2m1s elapsed]
aws_db_instance.My-RDS: Still creating... [2m11s elapsed]
aws_db_instance.My-RDS: Still creating... [2m21s elapsed]
aws_db_instance.My-RDS: Still creating... [2m31s elapsed]
aws_db_instance.My-RDS: Still creating... [2m41s elapsed]
aws_db_instance.My-RDS: Still creating... [2m51s elapsed]
aws_db_instance.My-RDS: Still creating... [3m1s elapsed]
aws_db_instance.My-RDS: Still creating... [3m11s elapsed]
aws_db_instance.My-RDS: Still creating... [3m21s elapsed]
aws_db_instance.My-RDS: Still creating... [3m31s elapsed]
aws_db_instance.My-RDS: Still creating... [3m41s elapsed]
aws_db_instance.My-RDS: Still creating... [3m51s elapsed]
aws_db_instance.My-RDS: Still creating... [4m1s elapsed]
aws_db_instance.My-RDS: Still creating... [4m11s elapsed]
aws_db_instance.My-RDS: Still creating... [4m21s elapsed]
aws_db_instance.My-RDS: Creation complete after 4m29s [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI]

```

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

F:\sem 6\SPCM\_LAB\spcm-lab-terraform\lab\_10>

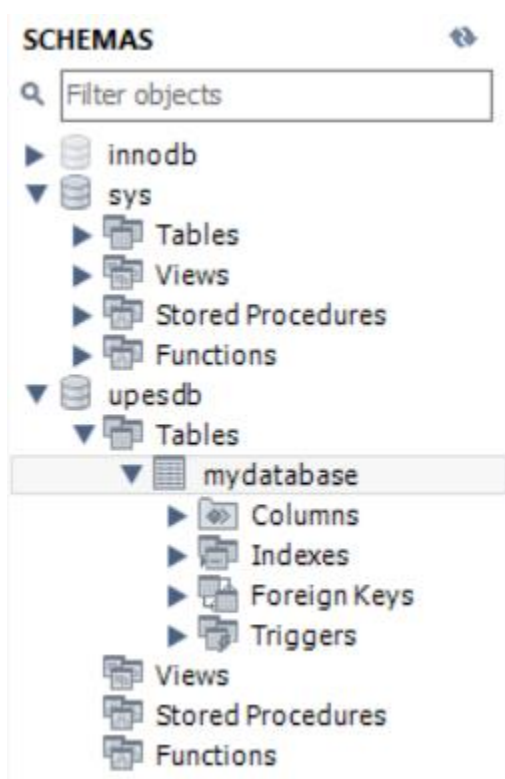
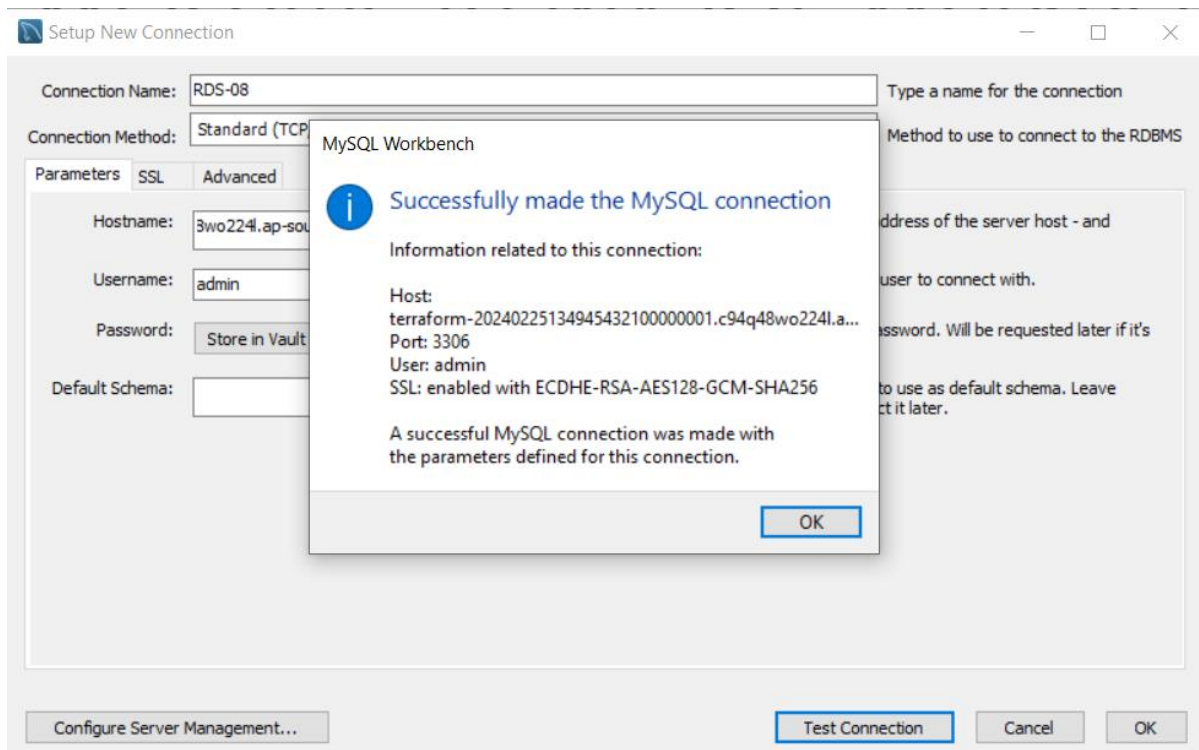
## Step 7: Verify the RDS Instance in AWS Console.



The screenshot shows the Amazon RDS console interface. On the left is a navigation menu with options like Dashboard, Databases, Query Editor, Performance insights, Snapshots, Exports in Amazon S3, Automated backups, Reserved instances, Proxies, Subnet groups, Parameter groups, Option groups, Custom engine versions, Events, and Event subscriptions. The main panel is titled 'Connectivity & security' and is divided into three sections:

- Endpoint & port:**
  - Endpoint: terraform-20240225134945432100000001.c94q48wo224lap-south-1.rds.amazonaws.com
  - Port: 3306
- Networking:**
  - Availability Zone: ap-south-1b
  - VPC: vpc-063259622707b83c5
  - Subnet group: default
  - Subnets:
    - subnet-0dc8309ad06d01eb0
    - subnet-021abd05255720165
    - subnet-06fc0f3f6f22ff3c1
  - Network type: IPv4
- Security:**
  - VPC security groups: default (sg-08d9cef06ed45a975) Active
  - Publicly accessible: Yes
  - Certificate authority: rds-ca-rsa2048-g1
  - Certificate authority date: May 20, 2061, 00:10 (UTC+05:30)
  - DB instance certificate expiration date: February 24, 2027, 19:22 (UTC+05:30)

## Step 8: Connect To MYSQL Workbench.



Step 9: Now Destroying the rds created.

```
F:\sem 6\SPCM_LAB\spcm-lab-terraform\lab_10>terraform destroy
aws_db_instance.My-RDS: Refreshing state... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI]
```

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_db_instance.My-RDS will be destroyed
- resource "aws_db_instance" "My-RDS" {
  - address                               = "terraform-20240225134945432100000001.c94q48wo2241.ap-south-1.rds.amazonaws.com" -> null
  - allocated_storage                     = 10 -> null
  - apply_immediately                     = false -> null
  - arn                                   = "arn:aws:rds:ap-south-1:953868252369:db:terraform-20240225134945432100000001" -> null
  - auto_minor_version_upgrade           = true -> null
  - availability_zone                     = "ap-south-1b" -> null
  - backup_retention_period               = 0 -> null
  - backup_target                         = "region" -> null
  - backup_window                         = "20:38-21:08" -> 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-20240225134945432100000001.c94q48wo2241.ap-south-1.rds.amazonaws.com:3306" -> null
  - engine                               = "mysql" -> null
  - engine_version                       = "5.7" -> null
  - engine_version_actual                  = "5.7.44" -> null
  - hosted_zone_id                        = "Z2VFMSZA74J7XZ" -> null
  - iam_database_authentication_enabled   = false -> null
  - id                                    = "db-ZBR2QLPZLUV0IW2F2RX2ULG3GI" -> null
  - identifier                            = "terraform-20240225134945432100000001" -> null
  - identifier_prefix                     = "terraform-" -> null
  - instance_class                        = "db.t2.micro" -> null
  - iops                                  = 0 -> null
  - license_model                         = "general-public-license" -> null
  - listener_endpoint                     = [] -> null
  - maintenance_window                    = "tue:12:23-tue:12:53" -> null
  - master_user_secret                    = [] -> null
  - max_allocated_storage                  = 0 -> null
  - monitoring_interval                    = 0 -> null
  - multi_az                              = false -> null
  - network_type                          = "IPv4" -> null
  - option_group_name                     = "default:mysql-5-7" -> null
  - parameter_group_name                  = "default:mysql5.7" -> null
  - password                              = (sensitive value) -> null
  - performance_insights_enabled           = false -> null
```

```
C:\Windows\System32\cmd.exe
```

```
- performance_insights_retention_period = 0 -> null
- port                                  = 3306 -> null
- publicly_accessible                   = true -> null
- replicas                              = [] -> null
- resource_id                           = "db-ZBR2QLPZLUV0IW2F2RX2ULG3GI" -> null
- skip_final_snapshot                   = true -> null
- status                                = "available" -> null
- storage_encrypted                      = false -> null
- storage_throughput                     = 0 -> null
- storage_type                           = "gp2" -> null
- tags                                  = {} -> null
- tags_all                              = {} -> null
- username                              = "admin" -> null
- vpc_security_group_ids                 = [
  - "sg-08d9cef06ed45a975",
] -> null
}
```

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

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



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

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_db_instance.My-RDS: Destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 10s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 20s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 30s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 40s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 50s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 1m0s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 1m10s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 1m20s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 1m30s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 1m40s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 1m50s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 2m0s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 2m10s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 2m20s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 2m30s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 2m40s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 2m50s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 3m0s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 3m10s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 3m20s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 3m30s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 3m40s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 3m50s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 4m0s elapsed]
aws_db_instance.My-RDS: Still destroying... [id=db-ZBR2QLPZLUV0IW2F2RX2ULG3GI, 4m10s elapsed]
aws_db_instance.My-RDS: Destruction complete after 4m14s
```

Destroy complete! Resources: 1 destroyed.

F:\sem 6\SPCM LAB\spcm-lab-terraform\lab\_10>

The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, a search bar, and user information for 'HimanshuHemant @ 9054-1823-5704'. The main content area is titled 'Resources' and displays a list of Amazon RDS resources in the 'ap-south-1' region. The resources are categorized into 'DB Instances (0/20)', 'Parameter groups (0)', 'Option groups (0)', and 'Snapshots (0)'. A 'Recommended for you' sidebar on the right provides links to 'Implementing Cross-Region DR' and 'Migrate SSRS to RDS for SQL Server'.