**Name:** T.Vamsi Kumar

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**Tutor:** Raham Shaik

**Project Name:** Infra setup through Terraform.

**Project:Terraform**

1. Created an EC2 instance and connected
2. Created user in IAM and saved credentials (Access key id & Secret access key)
3. Installed terraform in the instance
4. Created directory terraform and created for main.tf in directory
5. Wrote the terraform program on the main.tf file.

\* terraform project infrasetup (VPC, RDS, EC2(ONE , TWO ,THREE),BUCKETS,IAM (USER1,USER2,USER3 AND USER4) \*

provider "aws" {

region = "ap-south-1"

}

/\* 1.VPC vamsivpc \*/

resource "aws\_vpc" "vamsi\_vpc" {

cidr\_block = "10.5.0.0/16"

tags = {

Name = "vamsivpc"

}

}

/\* 2.RDS vamsi database \*/

resource "aws\_db\_instance" "default" {

allocated\_storage = 10

engine = "mysql"

engine\_version = "5.7"

instance\_class = "db.t3.micro"

db\_name = "vamsidb"

username = "vamsidatabase"

password = "Vamsi1234"

parameter\_group\_name = "default.mysql5.7"

skip\_final\_snapshot = true

}

/\* 3.EC2 instance 3 creation \*/

resource "aws\_instance" "webinstance" {

ami = "ami-08df646e18b182346"

instance\_type = "t2.micro"

count = length(var.instance\_names)

tags = {

Name = var.instance\_names[count.index]

}

}

variable "instance\_names" {

description = "EC2 INSTANCE"

type = list(string)

default = ["one" , "two" , "three"]

}

/\* 4.S3 BUCKETS CREATION \*/

resource "aws\_s3\_bucket" "vamsibucket" {

bucket = "my-tf-vamsi-bucket"

tags = {

Name = "vamsi\_bucket"

Environment = "Dev"

}

}

/\* 5.IAM USERS SETUP \*/

resource "aws\_iam\_user" "fresher" {

count = length(var.user\_names)

name = var.user\_names[count.index]

}

variable "user\_names" {

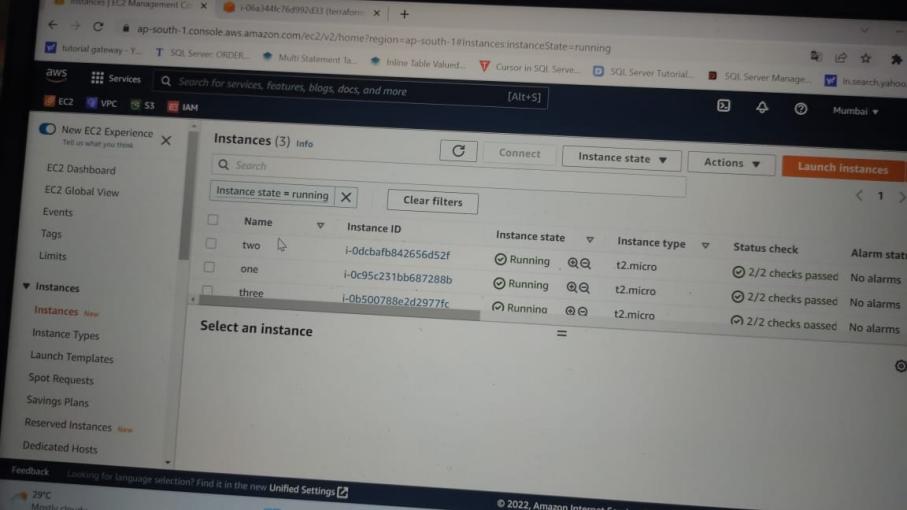
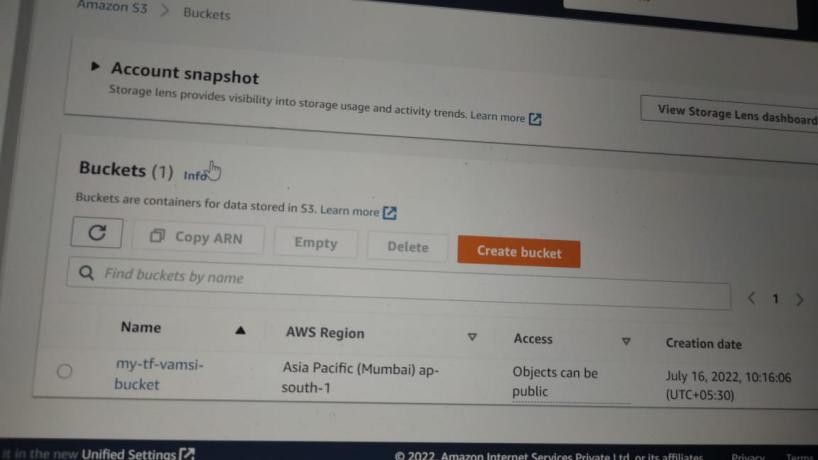
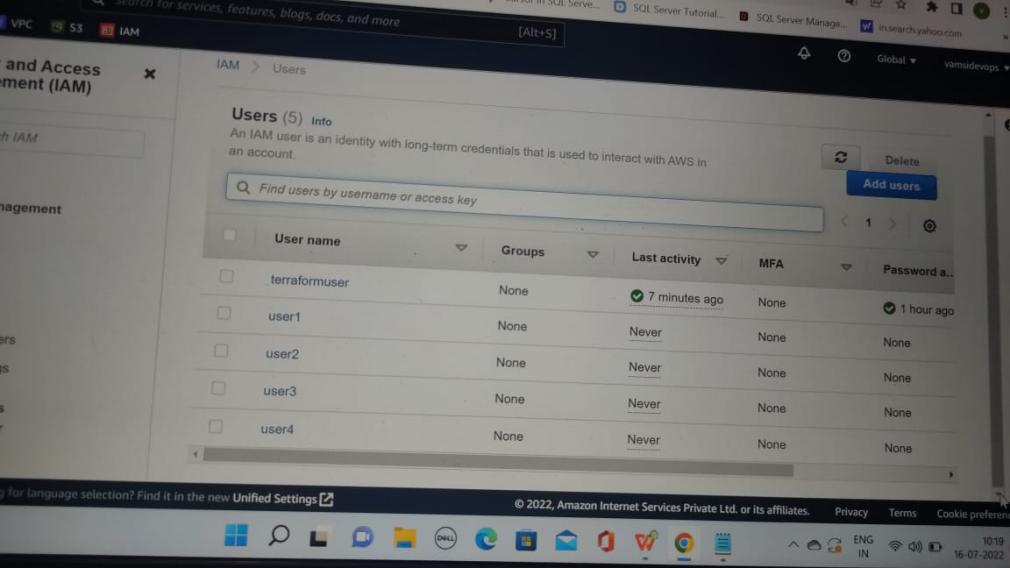
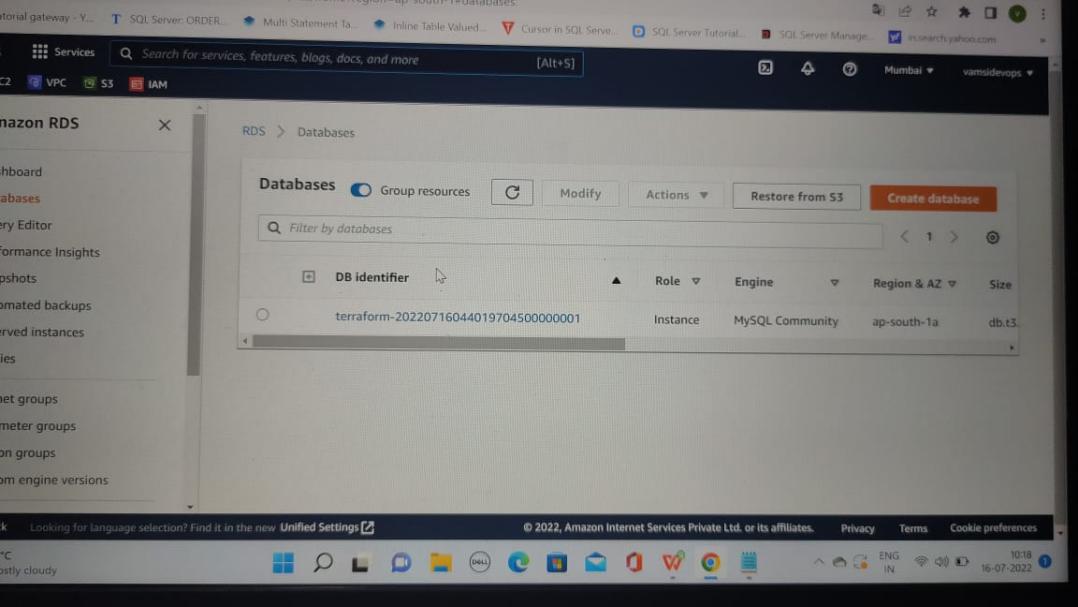
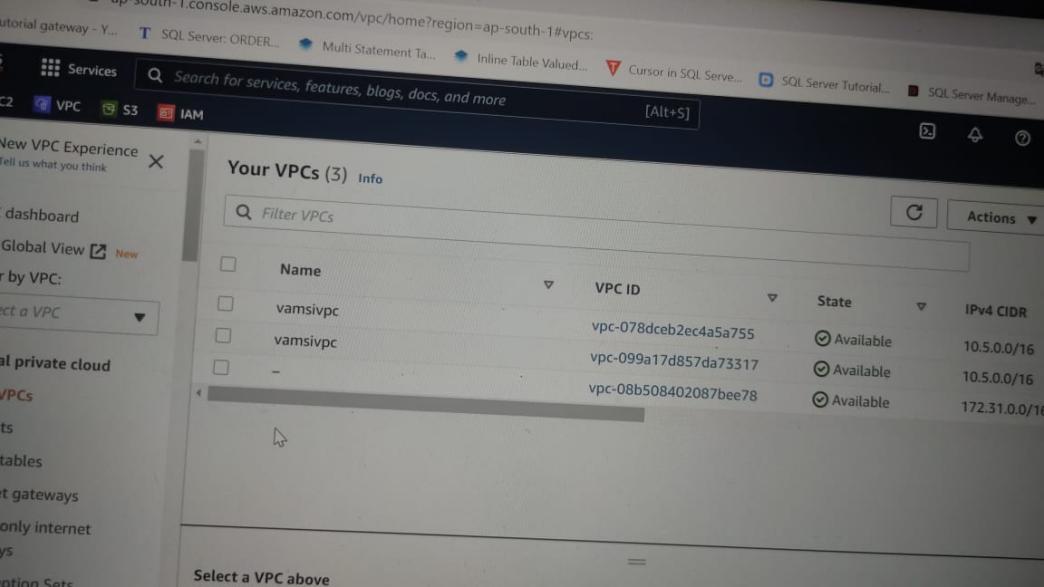
description = "IAM USERS"

type = list(string)

default = ["user1" , "user2" , "user3" , "user4"]

}

1. Ran terraform plan to check the program.
2. Successfully passed the program without error.Ran terraform apply command to execute the program and create the infrastructure
3. Successfully created ( 1 VPC, 1RDS, 2 EC2 INSTANCES (NAME : ONE & TWO), 3 S3 BUCKETS AND 4 IAM USERS (USER1, USER2, USER3 AND USER4):



1. Deleted the infrastructure by running the terraform destroy command.