resource "aws\_instance" "t2\_micro" {

count = 4

ami = "ami-0c55b159cbfafe1f0"

instance\_type = "t2.micro"

tags = {

name = "t2-micro-${count.index}"

}

}

resource "aws\_instance" "t2\_medium" {

count = 2

ami = "ami-0c55b159cbfafe1f0"

instance\_type = "t2.medium"

tags = {

name = "t2-medium-${count.index}"

}

}

resource "aws\_db\_instance" "mysql-rds" {

identifier = "mysql-rds-db"

engine = "mysql"

engine\_version = "5.7.30"

instance\_class = "db.t2.micro"

allocated\_storage = 10

storage\_type = "gp2"

username = "admin"

password = "password"

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

publicly\_accessible = true

skip\_final\_snapshot = true

vpc\_security\_group\_ids = [aws\_security\_group.mysql-rds.id]

tags = {

Name = "mysql-rds-db"

}

}

resource "aws\_security\_group" "mysql-rds" {

name\_prefix = "mysql-rds-"

}

resource "aws\_security\_group\_rule" "mysql-rds\_ingress" {

type = "ingress"

from\_port = 0

to\_port = 3306

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

security\_group\_id = aws\_security\_group.mysql-rds.id

}

# Install Apache Tomcat on the first EC2 instance

resource "null\_resource" "tomcat\_installation" {

count = 1

provisioner "remote-exec" {

inline = [

"sudo yum install -y java-1.8.0-openjdk",

"wget http://www-us.apache.org/dist/tomcat/tomcat-9/v9.0.54/bin/apache-tomcat-9.0.54.tar.gz",

"tar xzf apache-tomcat-9.0.54.tar.gz",

"sudo mv apache-tomcat-9.0.54 /opt/tomcat",

"sudo systemctl start tomcat",

"sudo systemctl enable tomcat"

]

connection {

type = "ssh"

user = "ec2-user"

host = aws\_instance.t2\_medium[0].public\_ip

}

}

}