#TERRAFORMBLOCK-------------------------

Terraformblock.tf

terraform {

required\_providers {

aws = {

source = "hashicorp/aws"

version = "5.62.0"

}

}

}

#PROVIDER BLOCK--------------------------------

Provider.tf

provider "aws" {

region = "us-east-1

}

#RESOURCE BLOCK-------------------------------

main.tf

#VPC----------------------

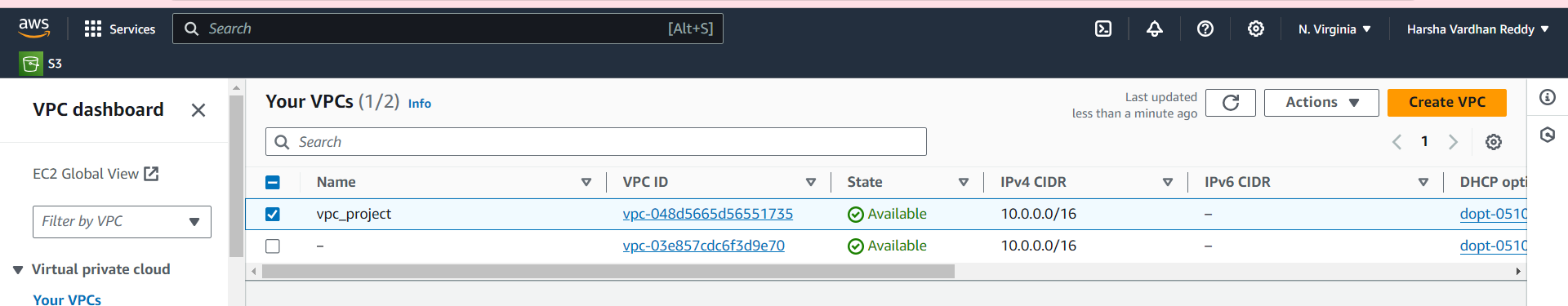
resource "aws\_vpc" "harsha-project"{

cidr\_block = "10.0.0.0/16"

tags = {

name = "vpc\_project"

}



#PUBLIC\_SUBNETS\_1----------------

resource "aws\_subnet" "public\_subnet\_1" {

vpc\_id = aws\_vpc.harsha-project.id

cidr\_block = "10.0.0.0/24"

map\_public\_ip\_on\_launch = "true"

availability\_zone = "us-east-1a"

tags = {

Name = "project\_public\_subnet\_1"

}

}

#PUBLIC\_SUBNETS\_2-------------------

resource "aws\_subnet" "public\_subnet\_2" {

vpc\_id = aws\_vpc.harsha-project.id

cidr\_block = "10.0.1.0/24"

map\_public\_ip\_on\_launch = "true"

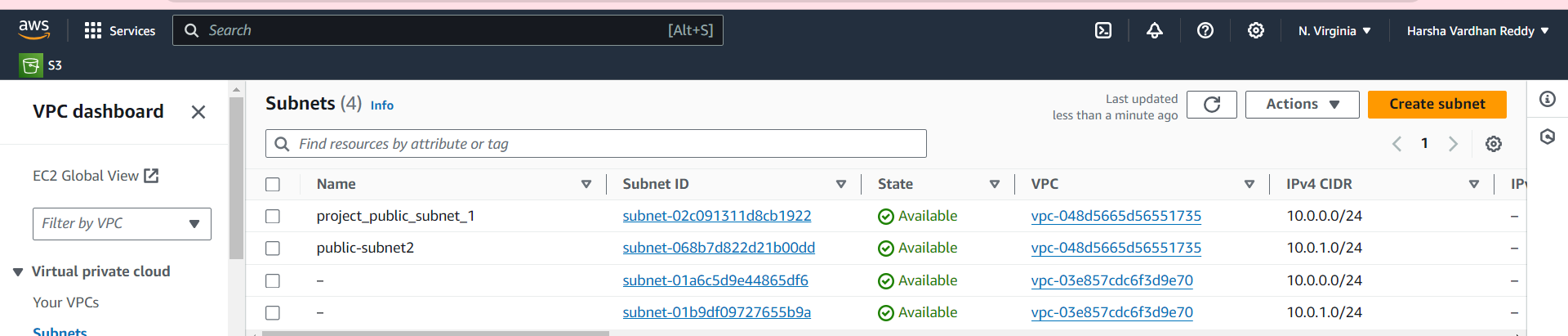
availability\_zone = "us-east-1b"

tags = {

Name = "public-subnet2"

}

}



# INTERNET GATEWAY-----------------------------------------------

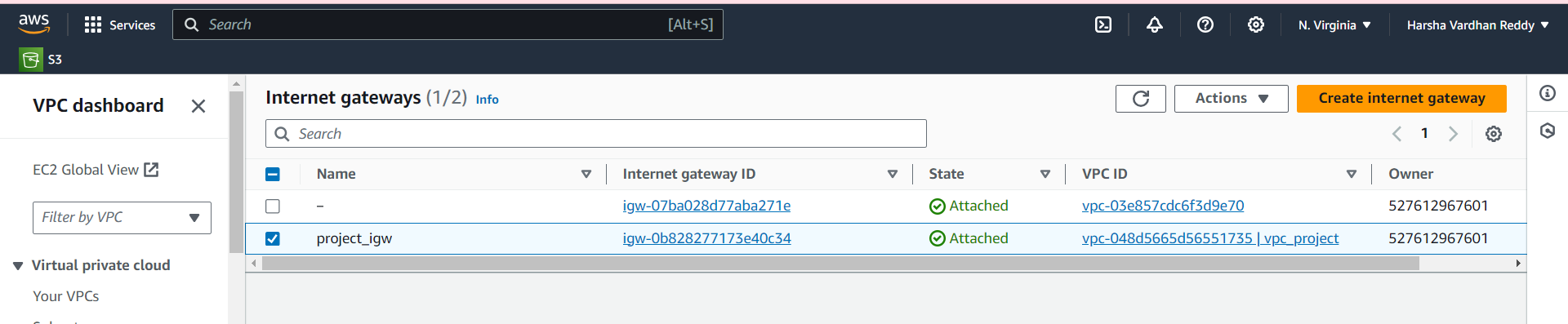
resource "aws\_internet\_gateway" "internet\_gateway" {

vpc\_id = aws\_vpc.harsha-project.id

tags = {

name = "project-igw"

}



# ROUTE TABLE -------------------------------------------

resource "aws\_route\_table" "route\_project" {

vpc\_id = aws\_vpc.harsha-project.id

route {

cidr\_block = "0.0.0.0/0"

gateway\_id = aws\_internet\_gateway.internet\_gateway.id

}

tags = {

Name = "route to internet"

}

}

# ROUTE TABLE ASSOCIATION------------------------------------

resource "aws\_route\_table\_association" "route\_table\_harsha" {

subnet\_id = aws\_subnet.public\_subnet\_1.id

route\_table\_id = aws\_route\_table.route\_project.id

}

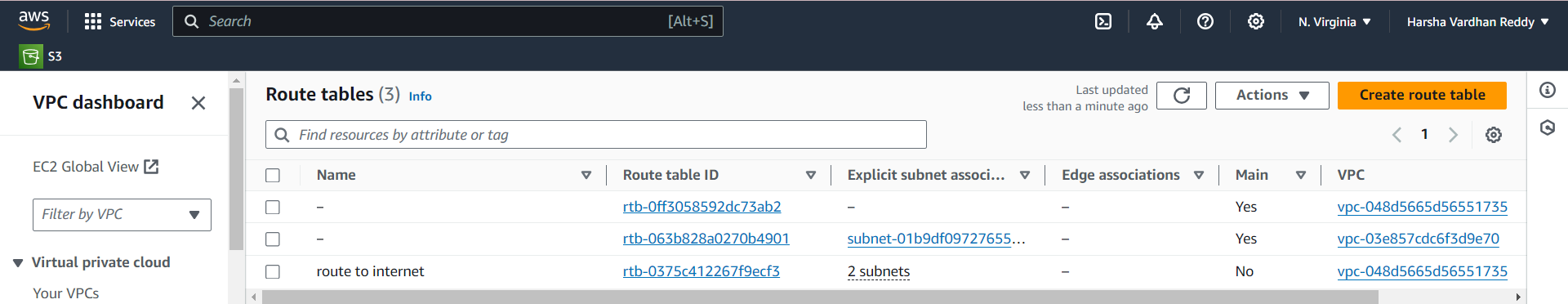
#route 2

resource "aws\_route\_table\_association" "route\_table\_harsha\_1" {

subnet\_id = aws\_subnet.public\_subnet\_2.id

route\_table\_id = aws\_route\_table.route\_project.id

}



#SECURITY\_GROUPS--------------------

Ec2instance.tf

resource "aws\_security\_group" "security\_today" {

name = "today-security"

description = "Dev VPC web"

vpc\_id = aws\_vpc.harsha-project.id

ingress {

description = "Allow Port 80"

from\_port = 80

to\_port = 80

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

ingress {

description = "Allow Port 22"

from\_port = 22

to\_port = 22

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

ingress {

description = "Allow Port 443"

from\_port = 443

to\_port = 443

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"]

}

egress {

description = "Allow all ip and ports outbound"

from\_port = 0

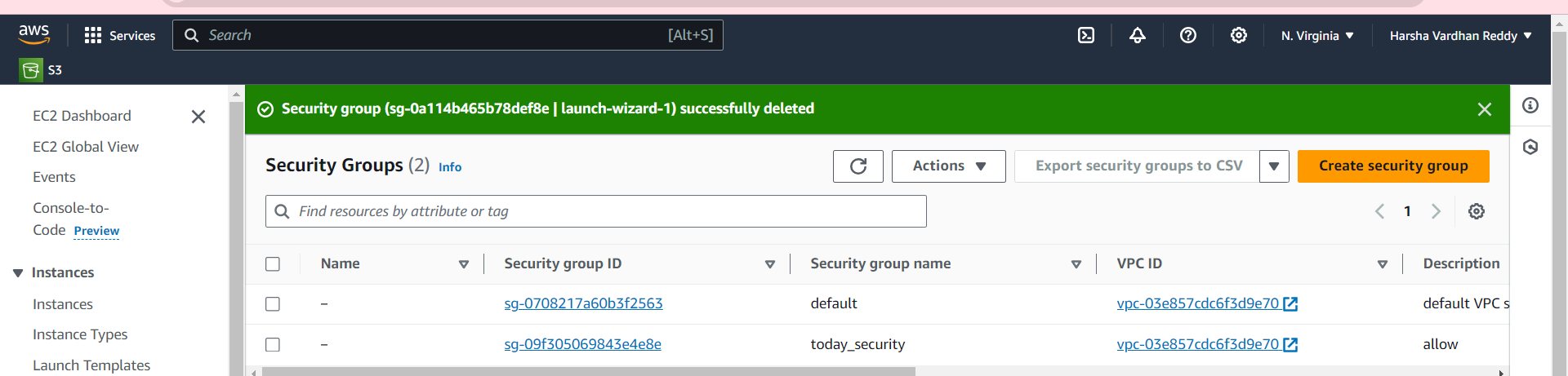
to\_port = 0

protocol = "-1"

cidr\_blocks = ["0.0.0.0/0"]

}

}



#EC2\_INSTANCE----------------

resource "aws\_instance" "harsha\_instance" {

ami = "ami-066784287e358dad1"

instance\_type = "t2.micro"

vpc\_security\_group\_ids = [aws\_security\_group.security\_today.id]

subnet\_id =aws\_subnet.public\_subnet\_1.id

key\_name = "l-b"

user\_data = file("apache-install.sh")

tags = {

Name = "today-project"

}

}

resource "aws\_instance" "harsha\_instance\_1" {

ami = "ami-066784287e358dad1"

instance\_type = "t2.micro"

vpc\_security\_group\_ids = [aws\_security\_group.security\_today.id]

subnet\_id =aws\_subnet.public\_subnet\_2.id

key\_name = "l-b"

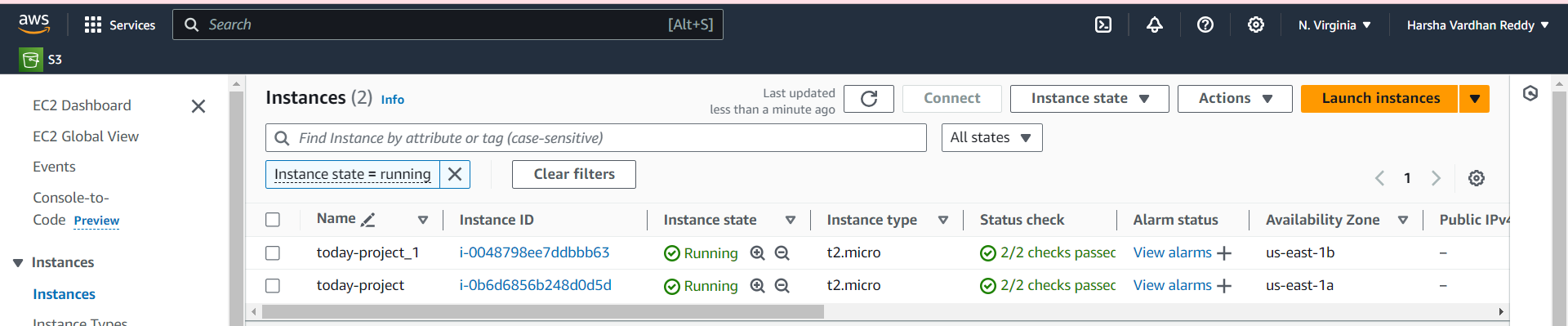
user\_data = file("apache-install.sh")

tags = {

Name = "today-project\_1"

}

}



#TARGET GROUP CREATE--------------

Targetload.tf

resource "aws\_lb\_target\_group" "target-group" {

name = "harshatargetgroup"

port = 80

protocol = "HTTP"

vpc\_id=aws\_vpc.harsha-project.id

health\_check {

path = "/health"

port = 80

protocol = "HTTP"

}

}

#LOAD BALANCER CREATE-----------

resource "aws\_lb" "project\_alb" {

name = "loadharsha"

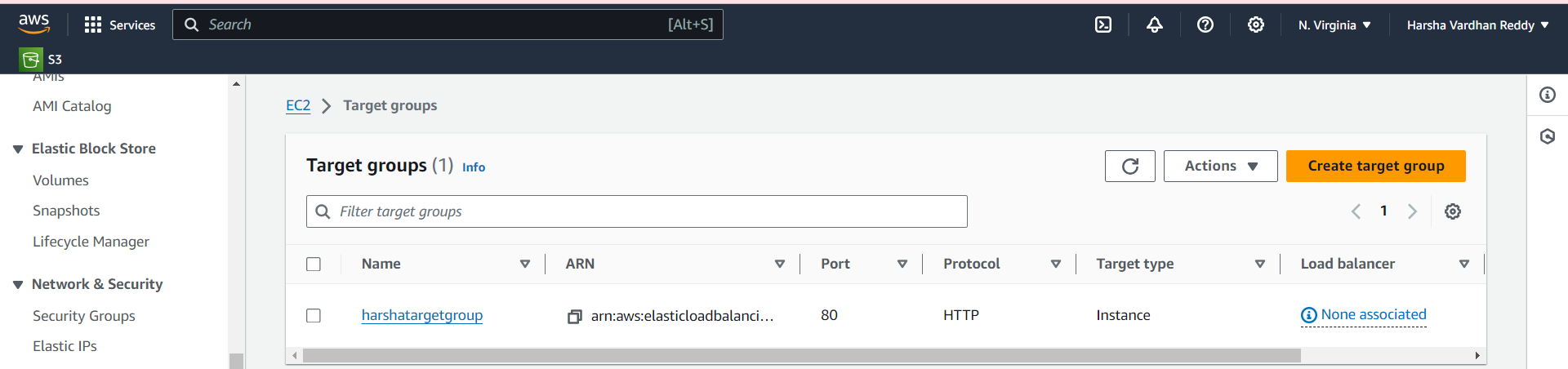
internal = false

load\_balancer\_type = "application"

security\_groups = [aws\_security\_group.security\_today.id]

subnets = [aws\_subnet.public\_subnet\_1.id, aws\_subnet.public\_subnet\_2.id]

}



# ATTACHMENT TARGET GROUP TO LOADBALANCER-----------

resource "aws\_lb\_target\_group\_attachment" "attachment" {

target\_group\_arn = aws\_lb\_target\_group.target-group.arn

target\_id = aws\_instance.harsha\_instance.id

port = 80

depends\_on = [

aws\_lb\_target\_group.target-group,aws\_instance.harsha\_instance,

]

}

resource "aws\_lb\_target\_group\_attachment" "attachment\_1" {

target\_group\_arn = aws\_lb\_target\_group.target-group.arn

target\_id = aws\_instance.harsha\_instance\_1.id

port = 80

depends\_on = [

aws\_lb\_target\_group.target-group,aws\_instance.harsha\_instance\_1,

]

}

resource "aws\_lb\_listener" "listener\_elb" {

load\_balancer\_arn = aws\_lb.project\_alb.arn

port = 80

protocol = "HTTP"

default\_action {

type = "forward"

target\_group\_arn = aws\_lb\_target\_group.target-group.arn

}

}

#OUTPUT BLOCK---------------------------

Output.tf

#dns of load balancer----------------

output "lb\_dns\_name" {

description = "DNS of Load balancer"

value = aws\_lb.project\_alb.dns\_name

}

# ec2\_instance public ip-------------------

output "instance\_public\_ip" {

description = "Public IP address of the EC2 instance"

value = aws\_instance.harsha\_instance.public\_ip

}

output "instance\_public\_1\_ip" {

description = "Public IP address of the EC2 instance"

value = aws\_instance.harsha\_instance\_1.public\_ip

}

