**Question 2 Part 2**

VPC

CIDR : 10.0.0.0/16

Subnets:

forinvest-vpc-subnet-public1: 10.0.0.0/20

forinvest-vpc-subnet-public2: 10.0.16.0/20

Security Groups:

WebServerSecurityGroup

Inbound Rules:

TCP 80 from 0.0.0.0/0

TCP 443 from 0.0.0.0/0

TCP ALL from AnsibleSecurityGroup

Outbond Rules:

TCP ALL from 0.0.0.0/0

AnsibleSecurityGroup

Inbound Rules:

TCP 22 from My IP

TCP 22 from WebServerSecurityGroup

Outbond Rules:

TCP ALL from 0.0.0.0/0

EC2 Instances:

web-server01

subnet: forinvest-vpc-subnet-public1

Instance type: t2.micro

AMI: Debian 11

Elastic IP: 34.236.88.26

web-server02

subnet: forinvest-vpc-subnet-public2

Instance type: t2.micro

AMI: Debian 11

Elastic IP: 35.174.161.121

AnsibleInstance

subnet: forinvest-vpc-subnet-public1

Instance type: t2.micro

AMI: Debian 11

**Setup Overview**

Webservers deployed on different Public subnet with Elastic IP’s. Ansible Instance deployed on one of the public subnet and restiricted inbound access from only my local computers IP for ssh connection. -In production environment load balancer with SSL offloading can be used if both server serving for same application-

A screenshot of a computer code

Description automatically generated

**Question 2 Part 2**

The dynamic inventory is configured via the aws\_ec2 plugin to query AWS for EC2 instances within the us-east-1 region. It filters instances by the tag Role: Webserver, ensuring that only the instances designated as web servers are targeted for the NGINX deployment.

**A screenshot of a computer

Description automatically generated**