AWS CloudFormation Task Documentation

This document provides a comprehensive walkthrough for the task of creating a public VPC, Subnet, EC2 instance, Elastic IP, Internet Gateway, and Security Group using AWS CloudFormation. The outputs and configurations are documented below as per the provided requirements.

VPC Creation

The VPC was created with the following details:

```
$ aws ec2 describe-vpcs --region us-east-2 --query "Vpcs[*].{VPCId:VpcId,CidrBlock:CidrBlock,IsDefault:IsDefault}" --output table

| DescribeVpcs |
| CidrBlock | IsDefault | VPCId |
| 10.0.0.0/16 | False | vpc-0287ad2c549dc6947 |
```

Subnet details

The Subnet created under the VPC has the following details:

Internet gateway details

The Internet Gateway was attached to the VPC with the following details:

```
Saws ec2 describe-internet-gateways --region us-east-2 --query "InternetGateways[*].{InternetGatewayId:InternetGatewayId,Attachments:Attachments}" --output table

| DescribeInternetGateways |
| InternetGatewayId |
| igw-016697cdf897a6949 |
| Attachments |
| State | VpcId |
| available | vpc-0287ad2c549dc6947 |
| available | vpc-0287ad2c549dc6947 |
```

Security groups details

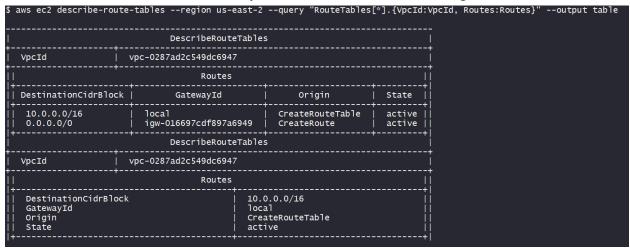
A security group was created to allow SSH access with the following details:

Inbound Rule: TCP 22 from 0.0.0.0/0

S aws ec2 describe-security-groupsregion us-east-2query "SecurityGroups[*].{GroupName:GroupName,GroupId:GroupId,Description:Description,VpcId:VpcId}" -output table				
DescribeSecurityGroups				
Description	GroupId	GroupName	VpcId	
default VPC security group Allow SSH access	sg-037b3b31c3ac5aff8 sg-007947a9114c0a711		vpc-0287ad2c549dc6947 vpc-0287ad2c549dc6947	

Route table details

The Route tables was successfully attached with the following details



Ec2 instance details

The EC2 instance was successfully launched with the following details: