AWS Cli Commands, Setting up the Infrastructure

**Create VPC’s**

1. Create a VPC

aws ec2 create-vpc --cidr-block 10.0.0.0/16

1. Lookup VPC Ids and Subnets

aws ec2 describe-vpcs --query "Vpcs[].{ID:VpcId,Block:CidrBlock}"

**Create Subnets**

1. Create a subnet

aws ec2 create-subnet --vpc-id vpc-0230d22981d7221e7 --cidr-block 10.0.0.0/24

1. Query subnets with Cidr Blocks and Id’s

aws ec2 describe-subnets --query Subnets[].{ID:SubnetId,Tags:Tags,Block:CidrBlock}

**Create Route Tables**

1. Create route table

aws ec2 create-route-table --vpc-id vpc-0230d22981d7221e7

1. Lookup Route ID and Subnet and Tag

aws ec2 describe-route-tables --query RouteTables[].{ID:RouteTableId,Routes:"Routes[].DestinationCidrBlock",Tags:Tags}Associate Route table to subnet

**Associate Route Table**

1. Associate Route Table to Subnet

aws ec2 associate-route-table --route-table-id rtb-0101aeba518a927aa --subnet-id subnet-0b97de1ceb13032b2

**Create Internet gateway**

1. Query a list of Internet Gateways

aws ec2 describe-internet-gateways --query InternetGateways[].{ID:InternetGatewayId,Tags:Tags}

1. Create Internet Gateway

aws ec2 create-internet-gateway

1. Attach gateway to VPC

aws ec2 attach-internet-gateway --internet-gateway-id igw-069f1b621d0ee6462 --vpc-id vpc-0230d22981d7221e7

**Add Route Table Entry**

1. Add routing table

aws ec2 create-route --route-table-id rtb-0101aeba518a927aa --destination-cidr-block 0.0.0.0/0 --gateway-id igw-069f1b621d0ee6462

**Create Security Group**

1. Create security group

aws ec2 create-security-group --group-name MySecurityGroup --description "My security group" --vpc-id vpc-0230d22981d7221e7

**Create EC2 Instance**

1. create Ec2 Instance

aws ec2 run-instances --image-id ami-0f3a15fc18df9c6e4 --count 1 --instance-type t2.micro --key-name Ncalifornia-Key --security-group-ids sg-043901be8eba35358 --subnet-id subnet-0b97de1ceb13032b2