UNI: kb2896
Name: KUNAL BAWEJA
Subject: COMS E6998 Cloud Computing & Big Data
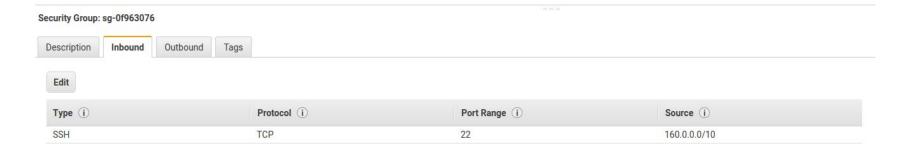
Screenshots for Creating AWS Instances via AWS CLI Tool

Mini-HW-1 (Part-1)

```
kunal@baweja:~$ aws ec2 --region us-west-2 create-security-group --group-name my-security-group --description "My Security Group"
{
    "GroupId": "sg-0f963076"
}
kunal@baweja:~$ aws ec2 --region us-west-2 authorize-security-group-ingress --group-name my-security-group --protocol tcp --port 22 --cidr 160.39.250.94/10
kunal@baweja:~$
```

Create and Configure my-security-group

| | sg-0f963076 | my-security-group | vpc-a2b3a7c6 | My Security Group |
| | sg-6e892e17 | default | vpc-a2b3a7c6 | default VPC security group |

Security Group: sg-0f963076

Description | **Inbound** | Outbound | Tags

Edit

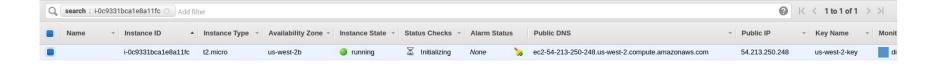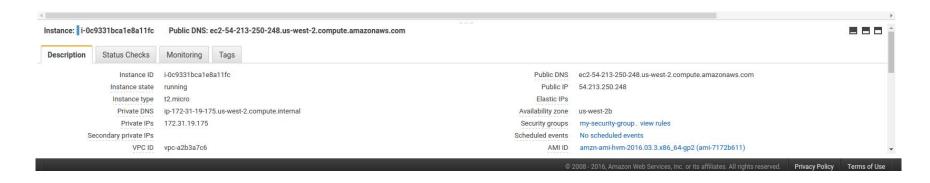| Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ
SSH	TCP	22	160.0.0.0/10

Verify security group creation and configuration

```
kunal@baweja:~$ aws ec2 --region us-west-2 create-security-group --group-name my-security-group --description "My Security Group"
{
    "GroupId": "sg-0f963076"
}
kunal@baweja:~$ aws ec2 --region us-west-2 authorize-security-group-ingress --group-name my-security-group --protocol tcp --port 22 --cidr 160.39.250.94/10
kunal@baweja:~$ aws ec2 run-instances --region us-west-2 --image-id ami-7172b611 --count 1 --instance-type t2.micro --key-name us-west-2-key --security-groups my-security-group
{
    "OwnerId": "644246451492",
    "ReservationId": "r-0f87c1b4cc1bfb3d4",
    "Groups": [],
    "Instances": [
        {
            "Monitoring": {
                "State": "disabled"
            },
            "PublicDnsName": "",
            "RootDeviceType": "ebs",
            "State": {
                "Code": 0,
                "Name": "pending"
            },
            "EbsOptimized": false,
            "LaunchTime": "2016-09-26T15:33:26.000Z",
            "PrivateIpAddress": "172.31.19.175",
            "ProductCodes": [],
            "VpcId": "vpc-a2b3a7c6",
            "StateTransitionReason": "",
            "InstanceId": "i-0c9331bca1e8a11fc",
            "ImageId": "ami-7172b611",
            "PrivateDnsName": "ip-172-31-19-175.us-west-2.compute.internal",
            "KeyName": "us-west-2-key",
            "SecurityGroups": [
                {
                    "GroupName": "my-security-group",
                    "GroupId": "sg-0f963076"
                }
            ],
            "ClientToken": "",
            "SubnetId": "subnet-a5f3ccc1",
            "InstanceType": "t2.micro",
            "NetworkInterfaces": [
                {
                    "Status": "in-use",
                    "MacAddress": "02:e2:22:50:9d:c7",
                    "SourceDestCheck": true,
                    "VpcId": "vpc-a2b3a7c6",
                    "Description": "",
                    "NetworkInterfaceId": "eni-e0de559f",
                    "PrivateIpAddresses": [
                        {
                            "PrivateDnsName": "ip-172-31-19-175.us-west-2.compute.internal",
                            "Primary": true,
                            "PrivateIpAddress": "172.31.19.175"
                        }
                    ],
                    "PrivateDnsName": "ip-172-31-19-175.us-west-2.compute.internal",
                    "Attachment": {
                        "Status": "attaching",
                        "DeviceIndex": 0,
                        "DeleteOnTermination": true,
                        "AttachmentId": "eni-attach-201be28e",
                        "AttachTime": "2016-09-26T15:33:26.000Z"
```

Launch a t2.micro ec2 instance

	Name		Instance ID		Instance Type		Availability Zone		Instance State		Status Checks		Alarm Status		Public DNS		Public IP		Key Name		Monit
☐			i-0c9331bca1e8a11fc		t2.micro		us-west-2b		🟢 running		⧗ Initializing		None		ec2-54-213-250-248.us-west-2.compute.amazonaws.com		54.213.250.248		us-west-2-key		di

Instance: i-0c9331bca1e8a11fc   **Public DNS:** ec2-54-213-250-248.us-west-2.compute.amazonaws.com

Description | Status Checks | Monitoring | Tags

Instance ID	i-0c9331bca1e8a11fc	Public DNS	ec2-54-213-250-248.us-west-2.compute.amazonaws.com
Instance state	running	Public IP	54.213.250.248
Instance type	t2.micro	Elastic IPs	
Private DNS	ip-172-31-19-175.us-west-2.compute.internal	Availability zone	us-west-2b
Private IPs	172.31.19.175	Security groups	my-security-group . view rules
Secondary private IPs		Scheduled events	No scheduled events
VPC ID	vpc-a2b3a7c6	AMI ID	amzn-ami-hvm-2016.03.3.x86_64-gp2 (ami-7172b611)

Verify launched instance in web console of AWS

```
kunal@baweja:~/Documents/cloud-bigdata-6998/aws$ ssh -i "us-west-2-key.pem" ec2-user@ec2-54-213-250-248.us-west-2.compute.amazonaws.com

       __|  __|_  )
       _|  (     /   Amazon Linux AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-ami/2016.03-release-notes/
13 package(s) needed for security, out of 26 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-19-175 ~]$ █
```

SSH into EC2 instance launched via AWS CLI tool

```
kunal@baweja:~/Documents/cloud-bigdata-6998/aws$ aws ec2 --region us-west-2 terminate-instances --instance-ids i-0c9331bca1e8a11fc
{
    "TerminatingInstances": [
        {
            "InstanceId": "i-0c9331bca1e8a11fc",
            "CurrentState": {
                "Code": 32,
                "Name": "shutting-down"
            },
            "PreviousState": {
                "Code": 16,
                "Name": "running"
            }
        }
    ]
}
kunal@baweja:~/Documents/cloud-bigdata-6998/aws$ 
```

Terminate EC2 instance from commandline

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS		Public IP		Key Name		Moni
☑		i-0c9331bca1e8a11fc	t2.micro	us-west-2b	🔴 terminated	None	🐢					us-west-2-key		☑ d

Instance: i-0c9331bca1e8a11fc   **Public DNS:** -

Description | Status Checks | Monitoring | Tags

Instance ID	i-0c9331bca1e8a11fc
Instance state	terminated
Instance type	t2.micro
Private DNS	-
Private IPs	
Secondary private IPs	-
VPC ID	-

Public DNS	-
Public IP	
Elastic IPs	
Availability zone	us-west-2b
Security groups	-
Scheduled events	-
AMI ID	amzn-ami-hvm-2016.03.3.x86_64-gp2 (ami-7172b611)

Confirm termination of EC2 instance