**Features associated with EC2 Instances**

1. **Security Groups –** Required to create an EC2 instance
   1. What is the role of a security group?
      1. By Default, Security Groups will block all access into EC2 instance unless allowed
   2. How do you create a security?
   3. How to you associate a SG to an existing Server
2. **Instance Types**
   1. What is an instance type and how is it related to an EC2 instance?
   2. How do you change the instance type for an existing EC2 instance?
3. **EIP (Elastic Internet Protocol)**
   1. What is an EIP?
   2. How do you create an EIP?
   3. How do you associate it to an EC2 instance?
4. Snapshots
5. **AMI** (Amazon Machine Image)
   1. What is an AMI
   2. How to create a custom AMI from an existing EC2 instance
   3. How to Copy an AMI from one region to another
6. EBS (Elastic Block Storage)
   1. This is a storage volume
   2. The main storage within our EC2 instance
      1. Required for storing data
      2. Required for installing software
7. Snapshots
   1. How do we backup our EC2 instances
      1. The way to take backup of our EC2 instance/EBS Volumes
      2. A Snapshots is a recovery plan for an EC2 instance to restore in the event of a disaster.
   2. How do you create a snapshot?
      1. EBS volume
      2. EC2 instance
   3. How do we copy a snapshot from one region to another?
   4. How do you create an EBS volume from a snapshot?
   5. How do we create an AMI from a snapshot?
8. Backup in AWS
   1. RTO – Recovery Time Objective
      1. How much time can a server be offline/down?
      2. What is the downtime for a particular server/server?
   2. RPO – Recovery Point Object
      1. How much data can be lost for an EC2 instance in the even of a disaster?
      2. The specified time indicated by app team or respective development team will match the criterial for the backup plan. E.g Daily backup or Monthly backup
9. AMI – Amazon Machine Image
   1. How do you create an AMI from an EC2 instance?
   2. How do we launch/create an EC2 instance from a custom AMI?
      1. By launching from AMI
      2. By selecting “My AMI”
10. Lifecycle Manager
    1. Automate the backup of EC2 instances or EBS volumes
       1. Assigning custom tags to these resources and using the tags are backup source.

**Homework:**

How can you copy a snapshot from one AWS account to another?

* Share with my account number 1727-7514-0033