**EC2 & EBS commands**

**Install MySQL in EC2 instance**

**sudo yum install -y mysql**

**Install AWS CLI in EC2 instance**

* **cd /home/ec2-user**
* **curl "https://awscli.amazonaws.com/awscli-exe-linux-x86\_64.zip" -o "awscliv2.zip"**
* **unzip awscliv2.zip**
* **sudo ./aws/install**

**Format EBS volume and mount it**

**Check device: lsblk**

**Check mounting: df -h**

**Go to home directory: cd /home/ec2-user**

**Check file format of device: sudo file -s /dev/xvdd**

**Format device with XFS file system: sudo mkfs -t xfs /dev/xvdd**

**Install XFS programs: sudo yum install xfsprogs**

**Make directory: mkdir 3aayaam-ebs-dir**

**Mount device with directory: sudo mount /dev/xvdd /home/ec2-user/3aayaam-ebs-dir**

**VPC commands**

**Copy key pair pem file to ec2 instance**

**scp -i 3aayaam-appendixa1-ec2-key-pair.pem 3aayaam-appendixa1-ec2-key-pair.pem ec2-user@<ip-addr>:/home/ec2-user/**

**Copy file from S3 to EC2 instance**

**aws s3 cp s3://www.3aayaam.in/<folder>/orders\_oltp\_app\_serverless.py ./**

**Glue Catalog commands**

**Login to Aurora MySQL**

**mysql --host <aurora-writer-endpoint> --port 3306 --user admin -p**

**Create tables**

**show databases;**

**use three\_aayaam\_mysql\_db;**

**create table orders (**

**order\_id varchar(100) primary key,**

**customer\_id varchar(100),**

**order\_status varchar(20),**

**order\_purchase\_date TIMESTAMP,**

**order\_approved\_at TIMESTAMP,**

**order\_delivered\_carrier\_date TIMESTAMP,**

**order\_delivered\_customer\_date TIMESTAMP,**

**order\_estimated\_delivery\_date TIMESTAMP**

**);**

**create table order\_items (**

**order\_id varchar(100),**

**order\_item\_id int,**

**product\_id varchar(100),**

**seller\_id varchar(100),**

**shipping\_limit\_date timestamp,**

**price decimal(8,2),**

**freight\_value decimal(8,2)**

**);**

**Load Aurora MySQL tables from S3**

**load data from s3 's3://<bucket>/retail\_small\_dataset/table\_set/orders/olist\_orders\_dataset.csv' into table orders FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';**

**load data from s3 's3://<bucket>/retail\_small\_dataset/table\_set/order\_items/olist\_order\_items\_dataset.csv' into table order\_items FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';**

**IAM Passrole policy for Glue Crawler**

**Get ARN from the Roles console in IAM:**

**{**

**"Version": "2012-10-17",**

**"Statement": [**

**{**

**"Effect": "Allow",**

**"Action": "iam:PassRole",**

**"Resource": "arn:aws:iam::<acct-id>:role/<role\_name>"**

**}**

**]**

**}**

**Lake Formation commands**

**Data Lake Admin policy. Change <acct-id>**

**{**

**"Version": "2012-10-17",**

**"Statement": [**

**{**

**"Effect": "Allow",**

**"Action": "iam:CreateServiceLinkedRole",**

**"Resource": "\*",**

**"Condition": {**

**"StringEquals": {**

**"iam:AWSServiceName": "lakeformation.amazonaws.com"**

**}**

**}**

**},**

**{**

**"Effect": "Allow",**

**"Action": [**

**"iam:PutRolePolicy"**

**],**

**"Resource": "arn:aws:iam::<acct-id>:role/aws-service-role/lakeformation.amazonaws.com/AWSServiceRoleForLakeFormationDataAccess"**

**},**

**{**

**"Effect": "Allow",**

**"Action": "glue:\*",**

**"Resource": "\*"**

**},**

**{**

**"Effect": "Allow",**

**"Action": "iam:PassRole",**

**"Resource": "arn:aws:iam::<acct-id>:role/3aayaam\_glue\_data\_catalog\_role"**

**}**

**]**

**}**