**Question 3:**

**Create an rds connection with ec2 instance and use it to create an sql database and a sample table.**

RDS stands for Relational Database service. It is a collection of managed services that makes it simple to set up, operate and scale databases in cloud. There are seven popular engines in RDS, they are

* Amazon Aurora with MySQL
* Amazon Aurora with PostgreSQL
* MySQL
* MariaDB
* PostgreSQL
* Oracle
* SQL Server
* By using RDS we can remove inefficient and time-consuming database administrative tasks
* No need to provision infrastructure or maintain software
* Can deploy relational database engines of your choice in the cloud or on-premises.
* Advantage of flexible pay-per-use pricing to suit various usage patterns.

**Steps to create a database and setting up connection to EC2 instance:**

**Step 1:** go to RDS service page in AWS console page and click create database

**Step 2:** select easy create to use recommended configurations by AWS or choose standard create to set up personalized configurations to the database.

**step 3:** select configuration such as engine type (MySQL), DB instance size, name and master username (admin) and generate master password and create the database.

**Step 4:** create an EC2 instance with same availability zone as the created database.

**step 5:** go to the RDS service page and to the database. In actions select set up ec2 connection and select the instance you wish to set up the connection to the database and confirm it.

**creating SQL database and a sample table in it:**

**step 1:** copy the SSH client command **ssh -i “batchpair.pem”** [**ec2-user@ec2-54-149-151-158.us-west-2.compute.amazonaws.com**](mailto:ec2-user@ec2-54-149-151-158.us-west-2.compute.amazonaws.com)

**step 2:** go to cmd and execute **sudo yum update -y and sudo yum install mariadb** to install mariadb.

**step 3:** execute **ssh -i “batchpair.pem”** [**ec2-user@ec2-54-149-151-158.us-west-2.compute.amazonaws.com**](mailto:ec2-user@ec2-54-149-151-158.us-west-2.compute.amazonaws.com) **-P 3306 -u admin -p** and enter password to connect to the RDS of the mentioned host, port, user.

**Step 4:** execute **CREATE DATABASE sampledb;** to create a database and

**Step 5: CREATE TABLE sampletable(**

**Id INT NOT NULL AUTO\_INCREAMET,**

**Name VARCHAR(50) NOT NULL,**

**PRIMARY KEY(id)**

**);** to create a table with columns named id and name

**Step 6:** execute **SHOW TABLES;** to view the tables in databse

**Step 7:** execute **INSERT INTO sampletable (name) VALUES (‘pushpa’);** to insert values the table.

**Step 8: SELECT \* FROM sampletable;** to view content the table.