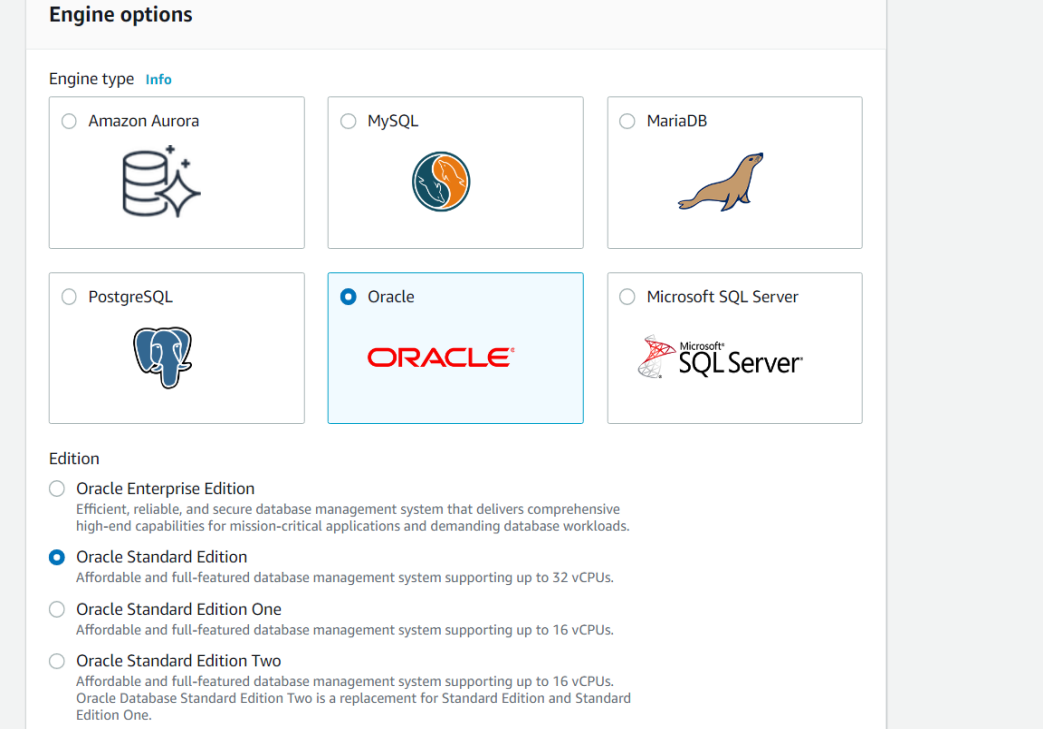
Lab 9

Run JAVA application by connecting to RDS Server in cloud

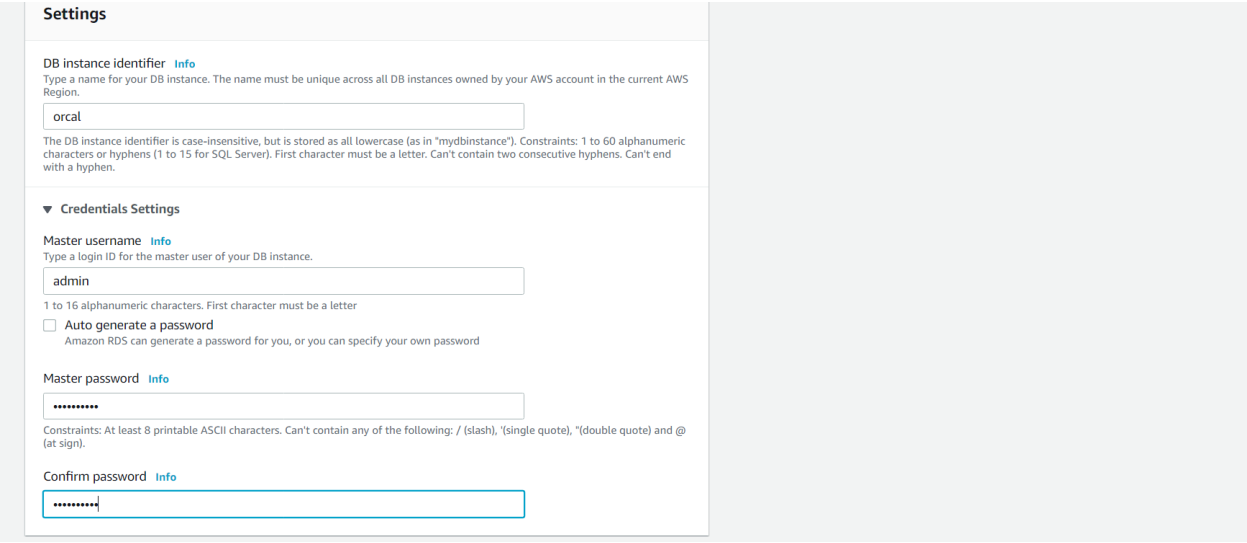
Step 1: Log in to AWS Console and Select RDS(Relational Database Server)

Step 2: In RDS Multiple Database Engines are available we are using Oracle Database Engine .Select the Oracle Standard Edition

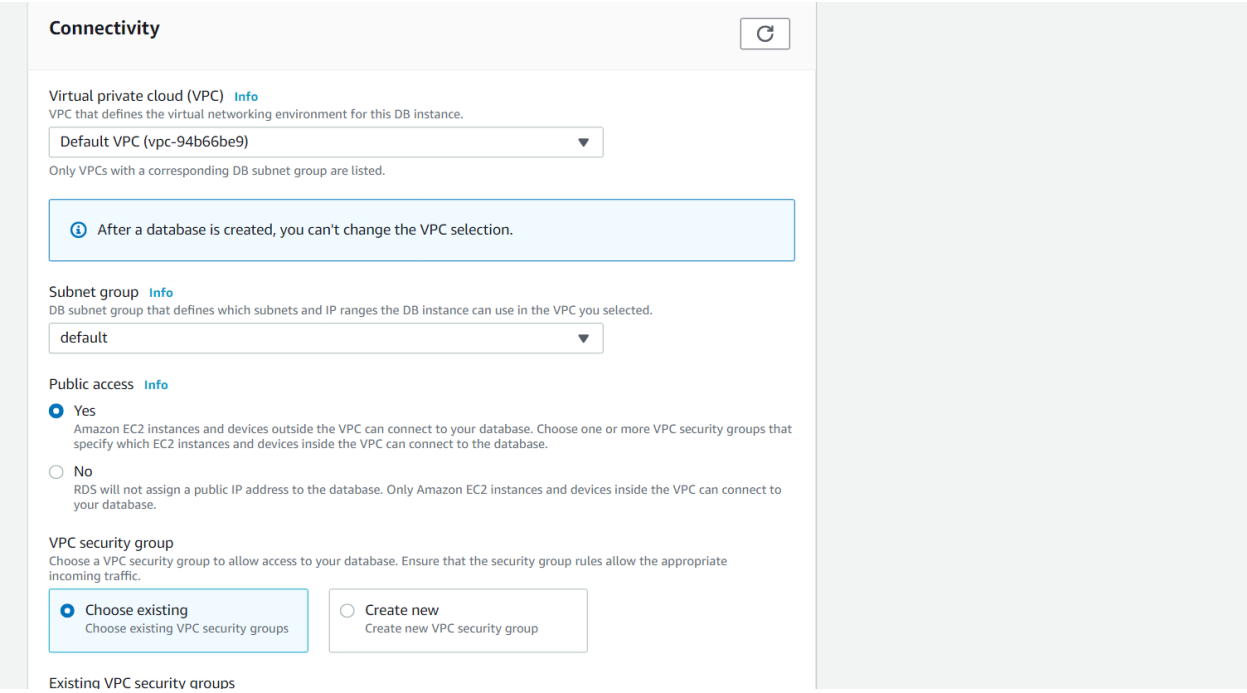


Step 3: Give DB instance identifier and Set Master username and password for oracle database

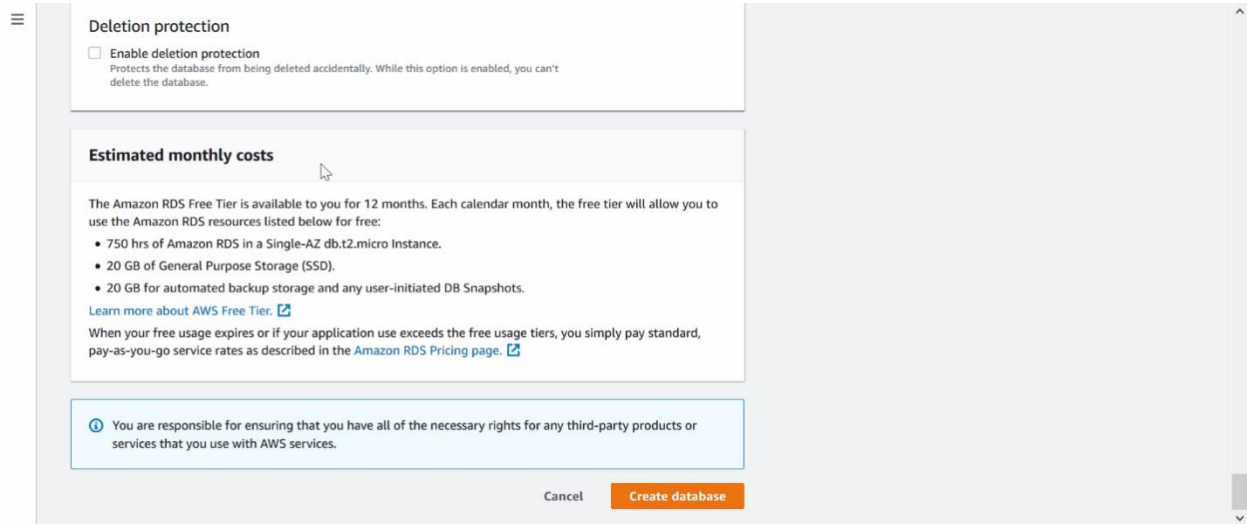
.



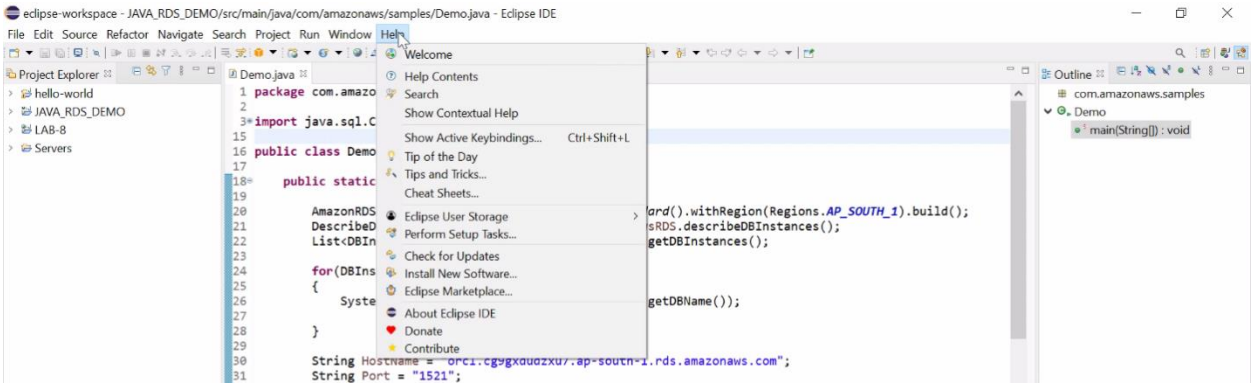
Step 4: Select Default VPC and then enable the Public access for the databse.



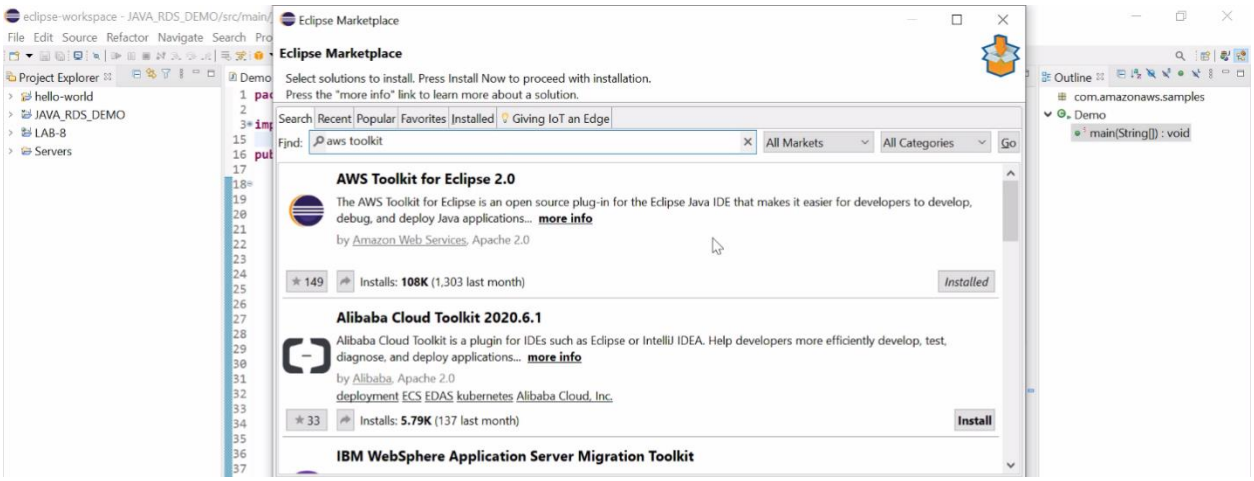
Step 5: Now click on create database (it will take few minutes to create a database)



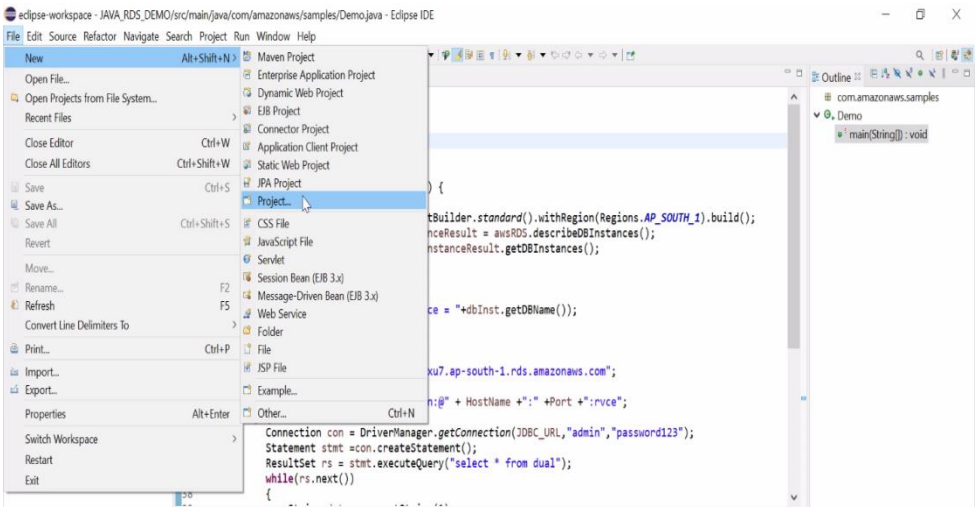
Step 6: Once the create database is clicked it will take some time to create the database. Now open the EclipseIDE and inside that go to Help section and select Eclipse Marketplace.



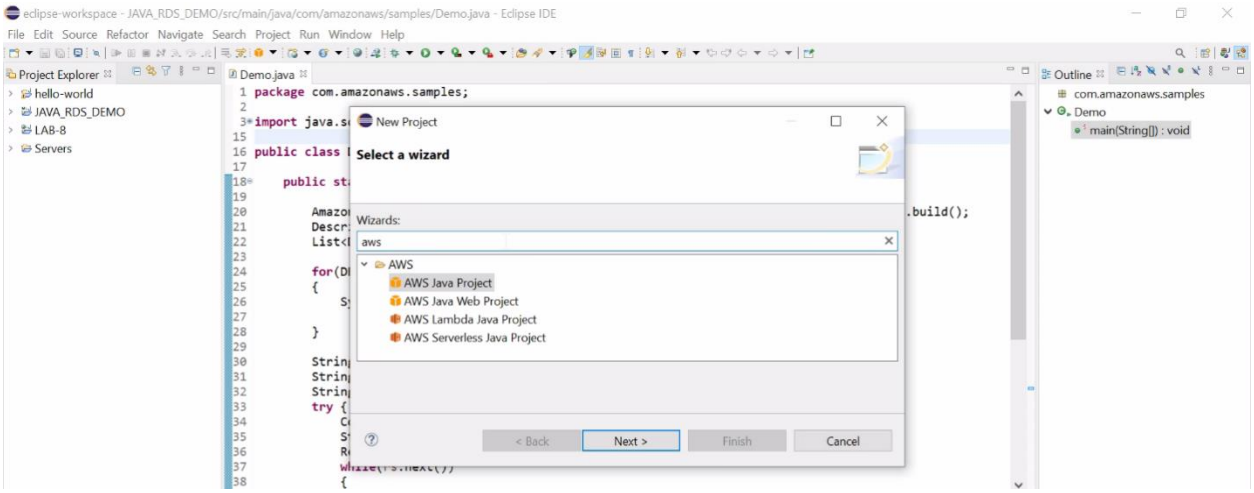
Step 8: Now search for the AWS Tool kit application inside Eclipse Marketplace and install it.



Step 9: Now Create new Project in Eclipse File->New->Project



Step 10: Select AWS Java Project



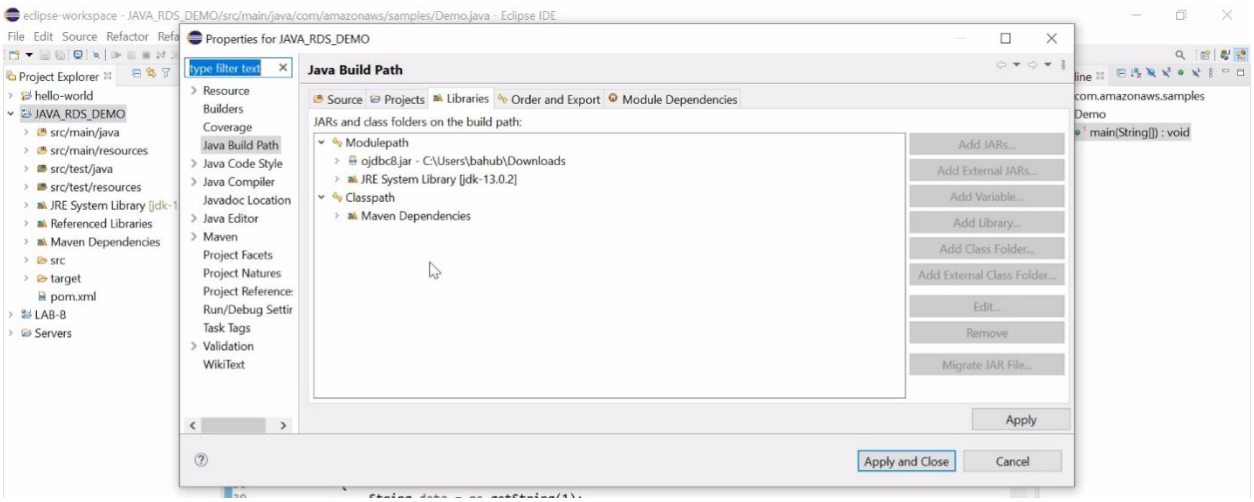
Change pom.xml file

Step 11: Write the following java code to connection database

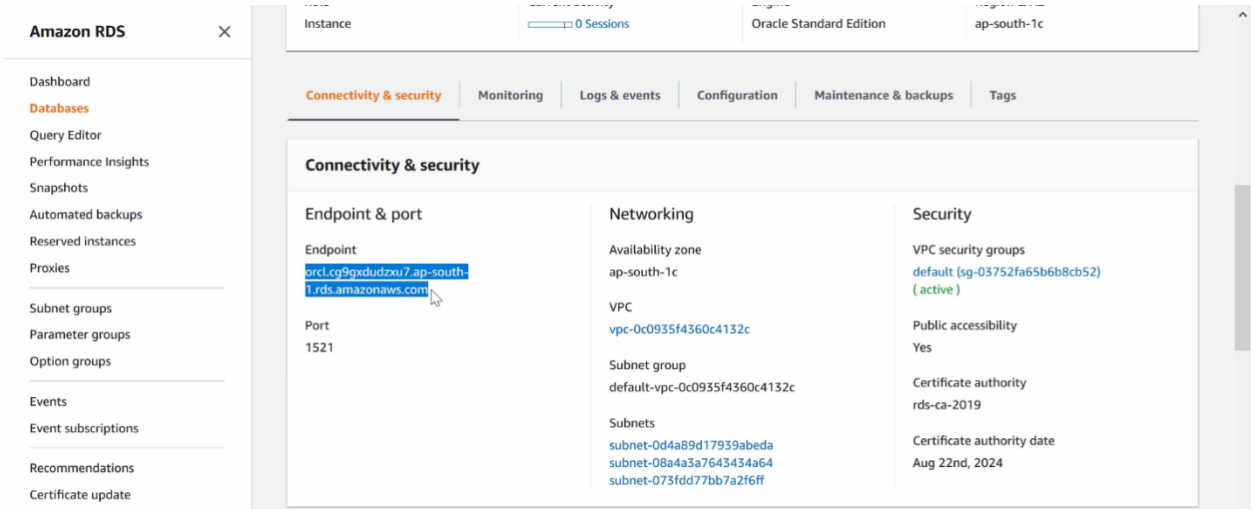
```
package
com.amazonaws.sample
s;

                    import java.sql.*;
                    import java.util.List;


                    import com.amazonaws.regions.Regions;
                    import com.amazonaws.services.rds.AmazonRDS;
                    import com.amazonaws.services.rds.AmazonRDSClientBuilder;
                    import com.amazonaws.services.rds.model.DBInstance;
                    import com.amazonaws.services.rds.model.DescribeDBInstancesResult;


                    public class LabCC {


                           public static void main(String[] args) {
                                  AmazonRDS awsRDS =
                    AmazonRDSClientBuilder.standard().withRegion(Regions.AP_SOUTH_1).bui
                    ld();
```

```
		DescribeDBInstancesResult dbInstancesResult =
awsRDS.describeDBInstances();

		List<DBInstance> dbInstance =
dbInstancesResult.getDBInstances();

		for(DBInstance dbInst: dbInstance) {
			System.out.println("DB Instances: " +
dbInst.getDBInstanceIdentifier());
		}

		String hostName = "db.c9thzloiayz8.ap-south-
1.rds.amazonaws.com";
		String port = "3308";
		String JDBC_URL = "jdbc:mysql://" + hostName + ":" +
port + "/emp";

		try {
			Connection con =
DriverManager.getConnection(JDBC_URL, "root", "root1234");
			Statement stmt = con.createStatement();

			ResultSet rs = stmt.executeQuery("select *
from employee");

			while(rs.next()) {
				String id = rs.getString(1);
				String name = rs.getString(2);

				System.out.println("ID is : " + id);
				System.out.println("Name is : "+
name);
			}
		} catch (SQLException e) {
			e.printStackTrace();
		}
	}
}
```

Step 12: Right Click on Project then go to Configure Build Path and then add the Downloaded external jar file(we need to download odbc8.jar)



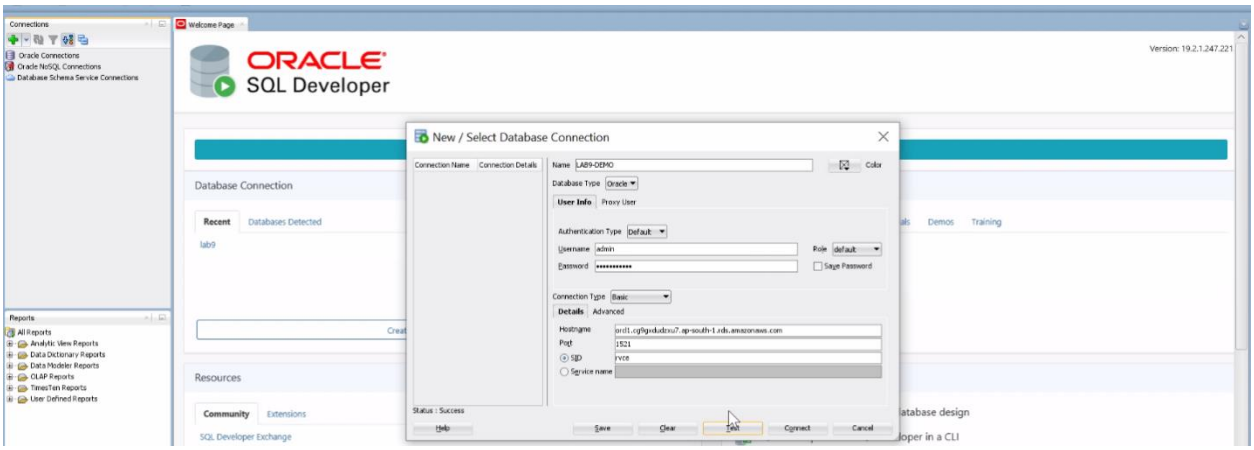
Step 13: Copy the Endpoint of RDS Database



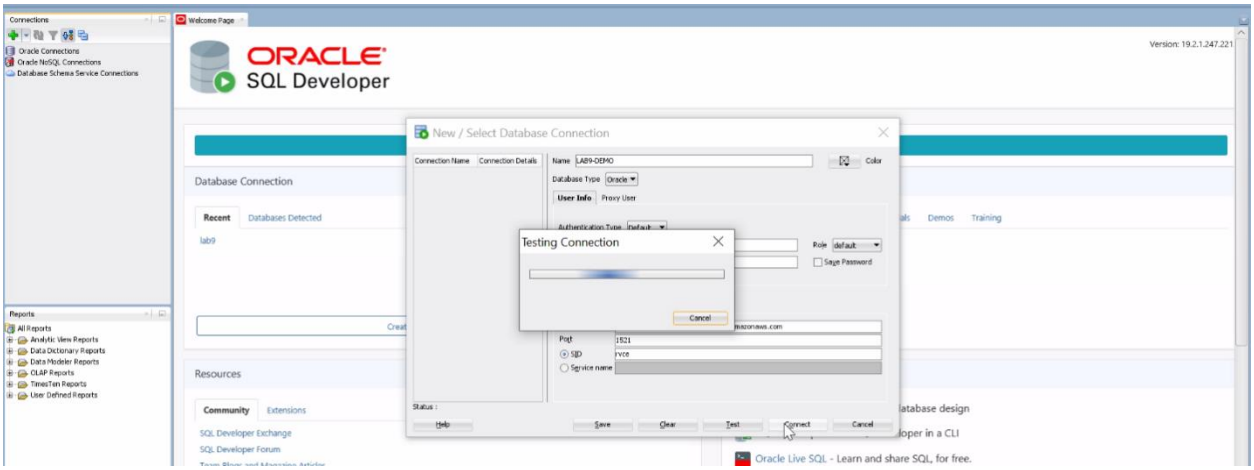
Step 14: Now we need to install ORCALE SQL Developer application

Step 15: Open the ORCALE SQL Application and create new connection

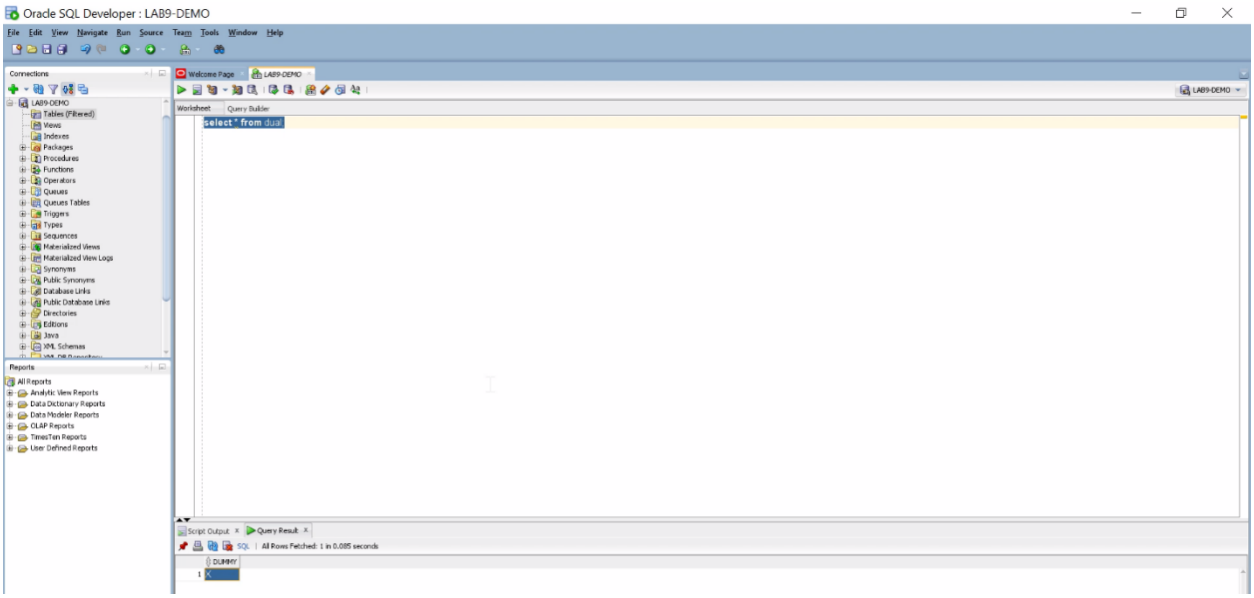
- Enter the name
- Enter username
- Enter the password
- Enter the hostname and database endpoint



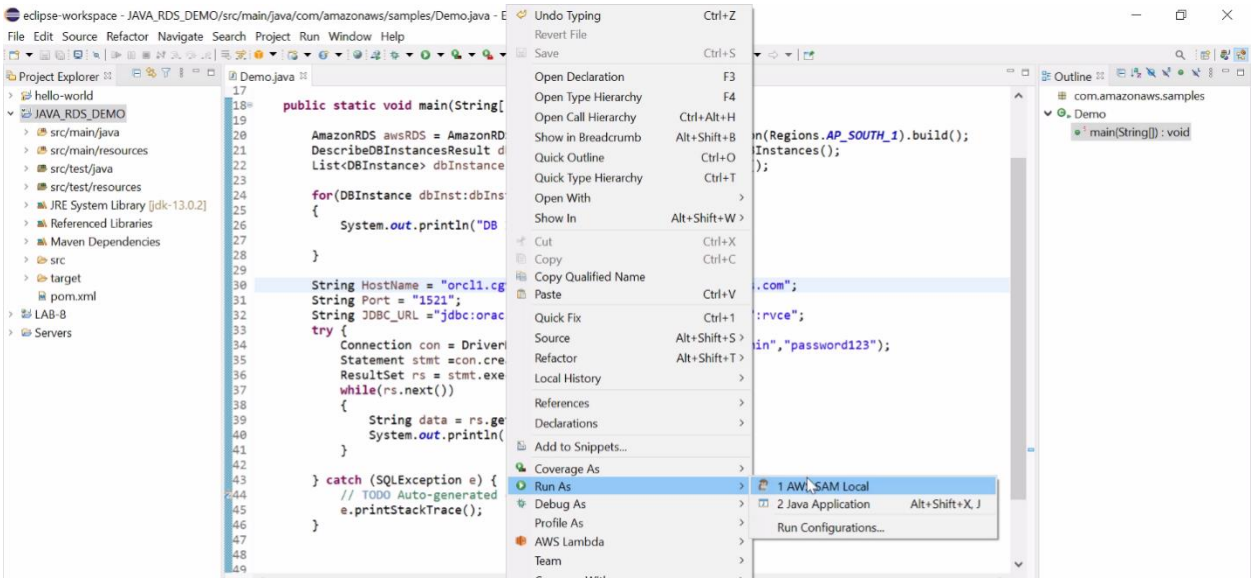
Step 16: Now click on the test connection button



Step 17: Now we established connection with database



Step 18: Right click and Select Run as Java Application



Step 19: Now we retrieved data from ORCALE Database.And it is displayed in Eclipse Console.