



**SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY**

**Enterprise Standards and Best Practices for IT Infrastructure**

**4<sup>th</sup> Year 1<sup>st</sup> Semester 2016**

## **Create and connect to a Data Base Instance in AWS**

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# Create a SQL Data Base instance in Amazon Web Services

## Pre-requirements:

You must have a personal account in [aws.amazon.com](https://aws.amazon.com/), if not go to <https://aws.amazon.com/> and create your account first.

## Step 01:

Select Amazon RDS from the AWS dashboard and click on Launch a database using RDS to proceed.

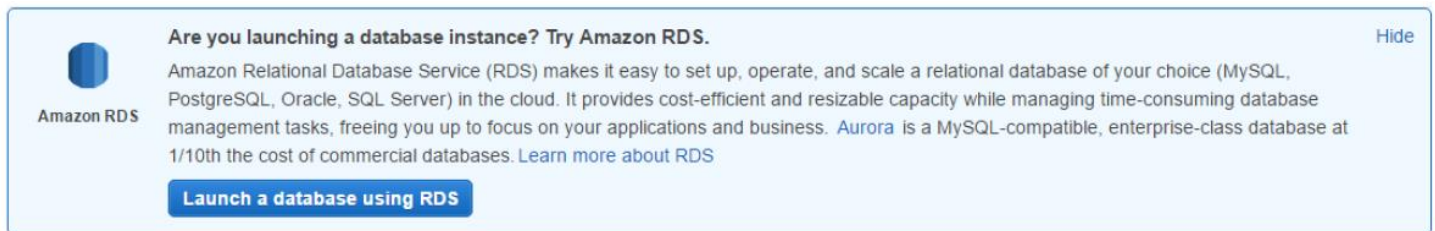


Figure 1

## Step 02:

From here click Get Started Now.

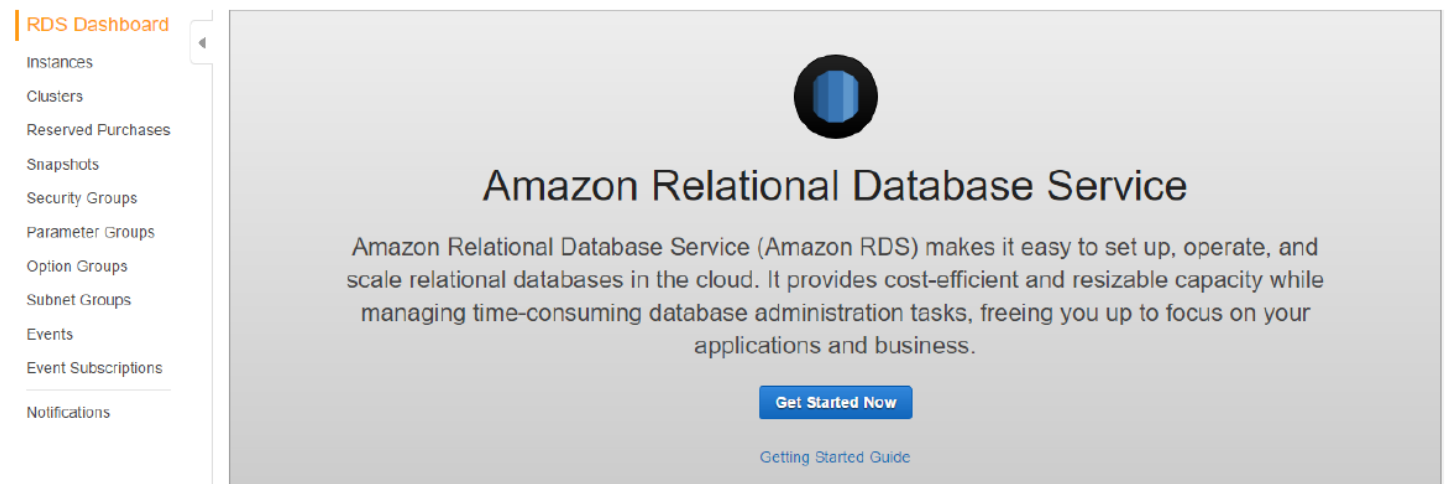


Figure 2

**Step 03:**

Select MySQL Engine as your DB Engine.

## Select Engine

To get started, choose a DB Engine below and click Select.

**Amazon  
Aurora**



### MySQL

MySQL Community Edition

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your

**Select**

Figure 3

**Step 04:**

Click on MySQL Dev/Test and click Next Step to proceed.

## Do you plan to use this database for production purposes?

### Production

☐ Amazon Aurora  
**Recommended**  
MySQL-compatible, enterprise-class database at 1/10th the cost of commercial databases.

☐ MySQL  
Use [Multi-AZ Deployment](#) and [Provisioned IOPS Storage](#) as defaults for high availability and fast, consistent performance.

### Dev/Test

☒ MySQL  
This instance is intended for use outside of production or under the [RDS Free Usage Tier](#).

Billing is based on [RDS pricing](#).

Cancel

Previous

**Next Step**

Figure 4

### Step 05:

From here you start to configure your DB. Specify DB Instance class, DB instance identifier, Master username and password.

## Specify DB Details

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### Free Tier

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The Amazon RDS Free Tier provides a single db.t2.micro instance as well as up to 20 GB of storage, allowing new AWS customers to gain hands-on experience with Amazon RDS. Learn more about the RDS Free Tier and the instance restrictions [here](#).

☐ Only show options that are eligible for RDS Free Tier

### Instance Specifications

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**DB Engine** mysql

**License Model**

**DB Engine Version**



Review the **Known Issues/Limitations** to learn about potential compatibility issues with specific database versions.


**DB Instance Class**

**Multi-AZ Deployment**

Figure 5

Storage Type
- Select One -

Allocated Storage\*
5
GB


Provisioning less than 100 GB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Click here](#) for more details.

Settings

DB Instance Identifier\*
mysql-test

Master Username\*
annnnnuza

Master Password\*
.....

Confirm Password\*
.....|

Retype the value you specified for Master Password.

\* Required


Cancel
Previous
Next Step

Figure 6

## Step 06:

Configure your advance setting as below and click Launch DB Instance to launch your Db in AWS.

## Configure Advanced Settings

Network & Security


VPC\*
Default VPC (vpc-bf80dcda)

Subnet Group
default

Publicly Accessible
Yes

Availability Zone
us-west-2a

VPC Security Group(s)

Create new Security Group
default (VPC)
launch-wizard-1 (VPC)
launch-wizard-2 (VPC)

Figure 7

## Database Options

Database Name	<input type="text" value="my-db"/>
<small>Note: if no database name is specified then no initial MySQL database will be created on the DB Instance.</small>	
Database Port	<input type="text" value="3306"/>
DB Parameter Group	<input type="text" value="default.mysql5.6"/>
Option Group	<input type="text" value="default:mysql-5-6"/>
Copy Tags To Snapshots	<input type="checkbox"/>
Enable Encryption	<input type="text" value="No"/>

Figure 8

### Backup

Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to detail [here](#).

Backup Retention Period	<input type="text" value="7"/> days
Backup Window	<input type="text" value="No Preference"/>

### Monitoring

Enable Enhanced Monitoring	<input type="text" value="No"/>
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### Maintenance

Auto Minor Version Upgrade	<input type="text" value="Yes"/>
Maintenance Window	<input type="text" value="No Preference"/>

\* Required

Cancel

Previous

Launch DB Instance

Figure 9

### Step 07:

Now you can see your DB is running in AWS.


	▼	MySQL	mysql-test	available	 1.00%	 5 Connections	None
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Figure 10

# Connect to the created DB instance in AWS

## Step 01:

Open MySQL WorkBench and select new server instance.

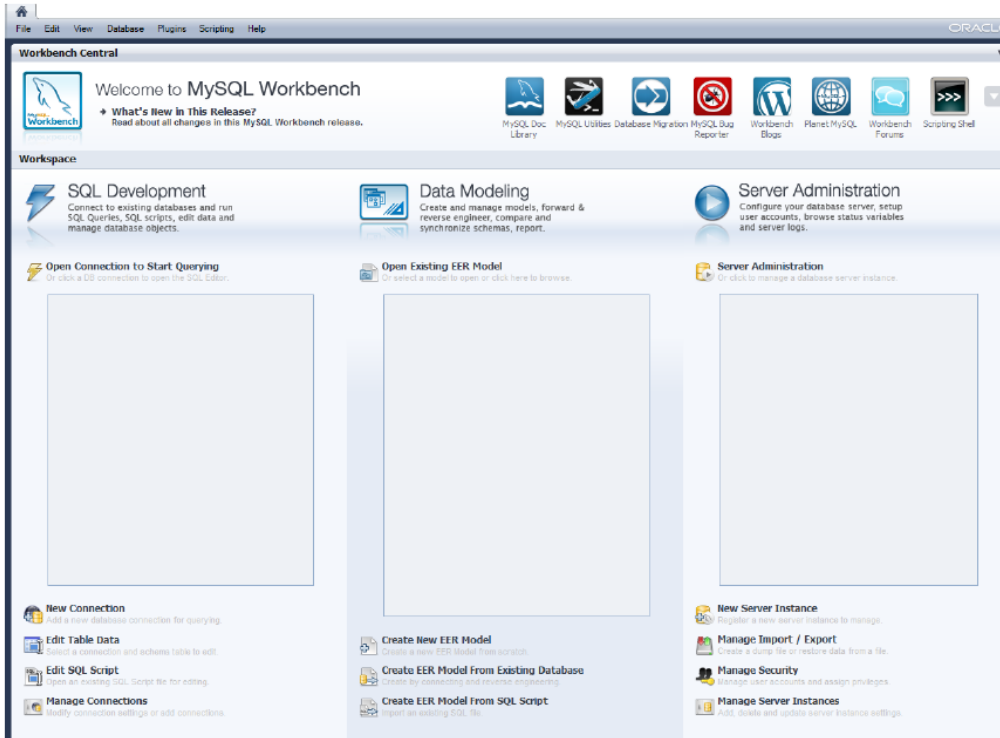


Figure 11

## Step 02:

Enter the host address of your instance in AWS as the address and click next.

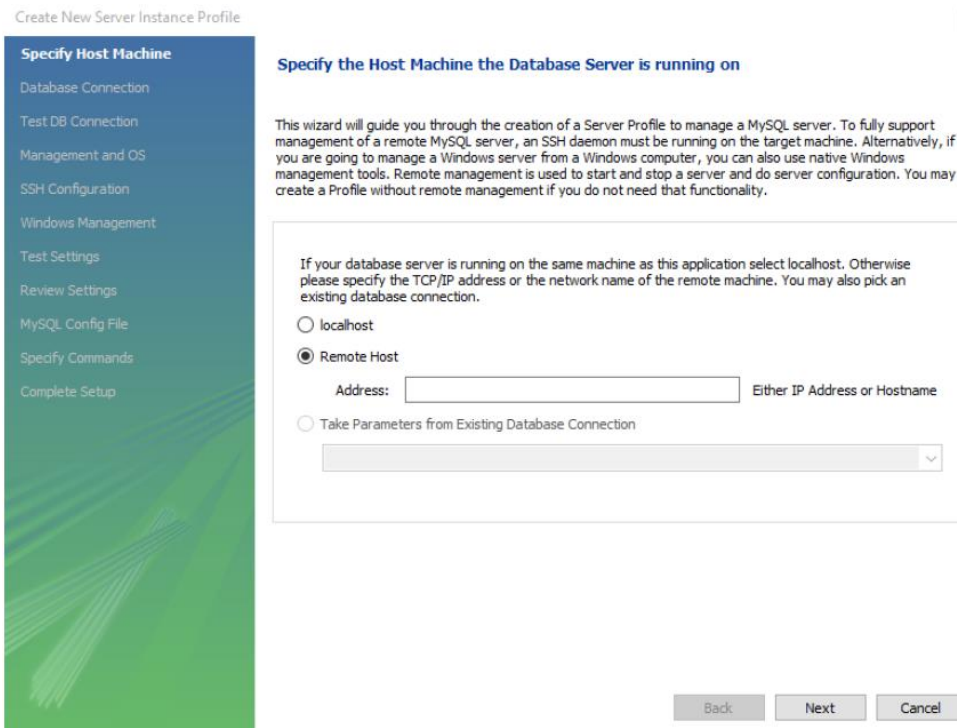


Figure 12



### Step 03:

Provide the Master user name you configured and click next.

Create New Server Instance Profile

Specify Host Machine

**Database Connection**

Test DB Connection

Management and OS

SSH Configuration

Windows Management

Test Settings

Review Settings

MySQL Config File

Specify Commands

Complete Setup

**Set the Database Connection values**

Connection Name:  Type a name for the connection

Connection Method:  Method to use to connect to the RDBMS

Parameters **Advanced**

Hostname:  Port:  Name or IP address of the server host. - TCP

Username:  Name of the user to connect with.

Password:   The user's password. Will be requested later

Default Schema:  The schema to use as default schema. Leave

Figure 13

### Step 04:

Proved the Master password here and click ok to proceed.

Create New Server Instance Profile

Specify Host Machine

**Database Connection**

Test DB Connection

Management and OS

SSH Configuration

Windows Management

Test Settings

Review Settings

MySQL Config File

Specify Commands

Complete Setup

**Testing the Database Connection**

The database connection information is being tested. This might take a few moments depending on your network connection.

☒ Open Database Connection

☐ Get Server Version

☐ Get Server OS

Connecting to database server...

**Connect to MySQL Server**

Please enter password for the following service:

Service:

User:

Password:

☐ Save password in vault

Figure 14



## Step 05:

Upon completion of the connection test, set the configurations values to default as below.

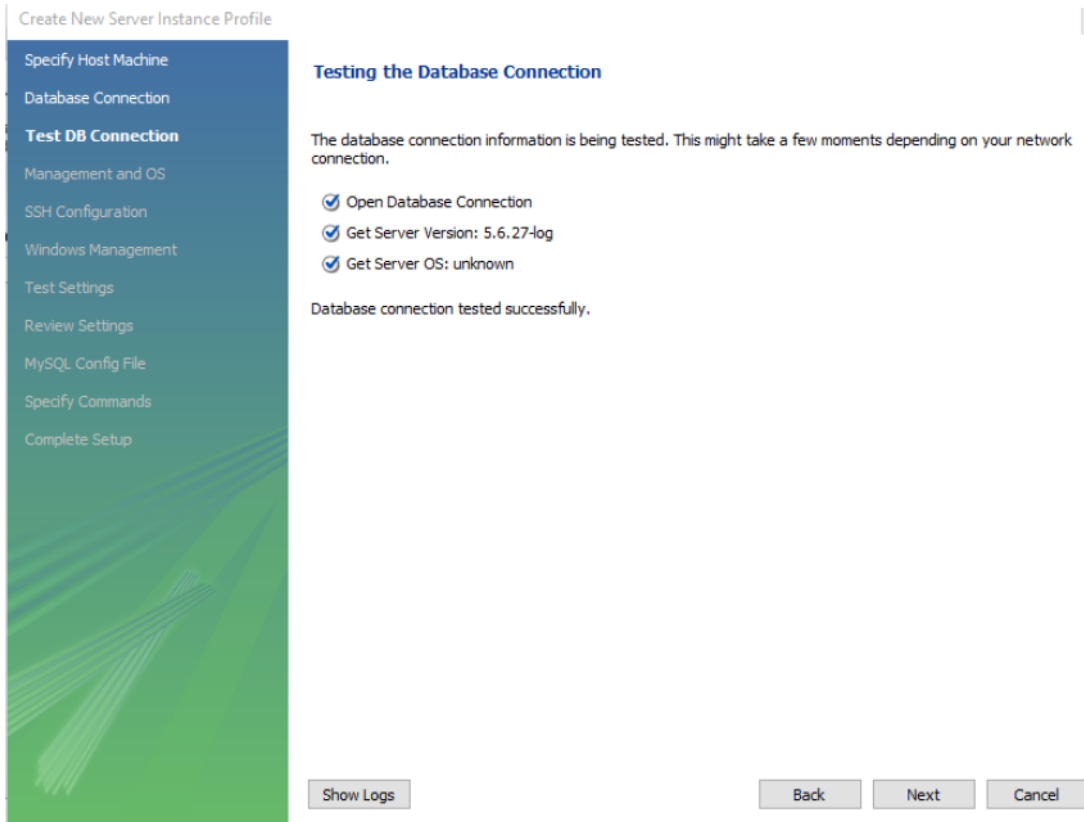


Figure 15

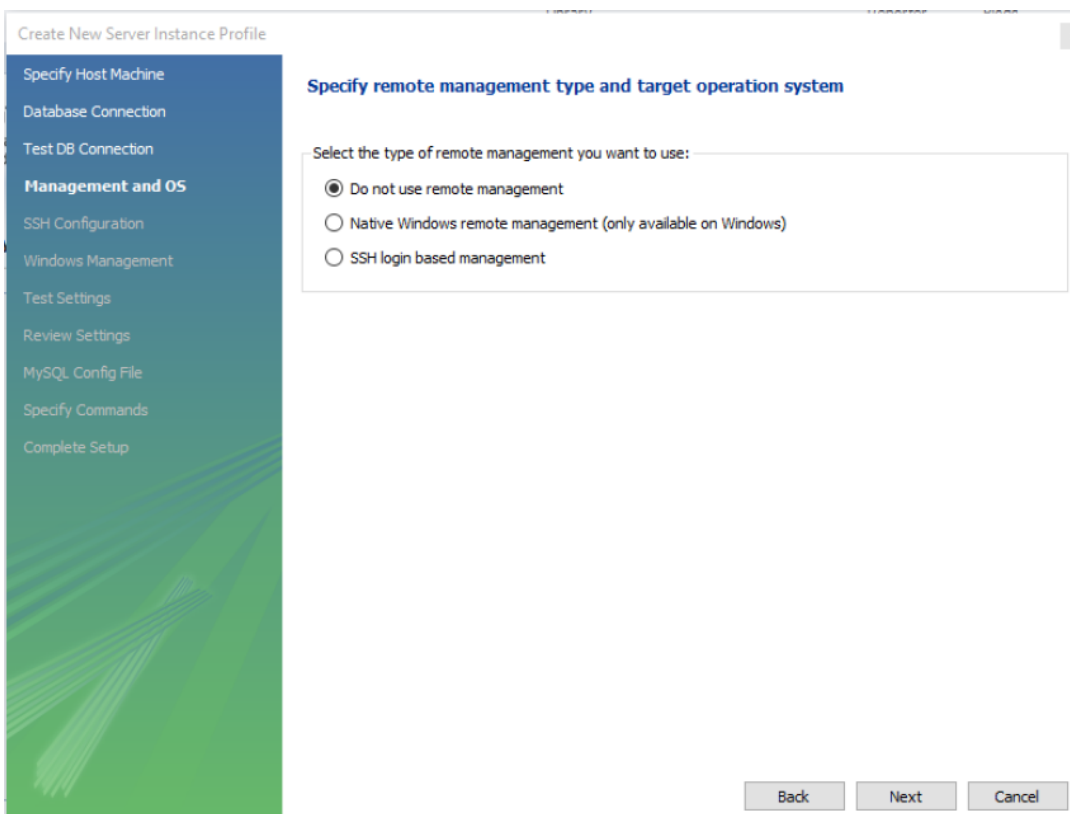


Figure 16

### Step 06:

Now you can start server administration after providing the password.

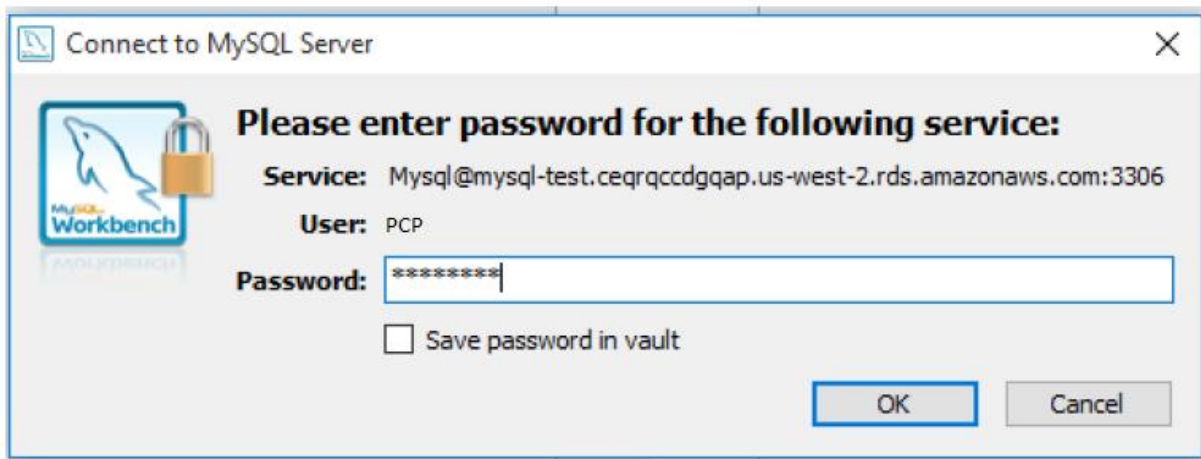
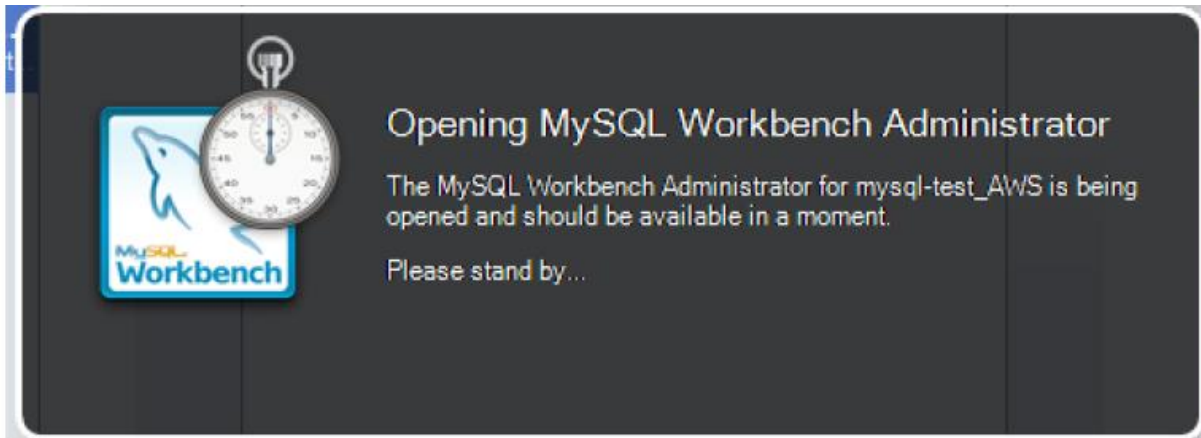


Figure 17

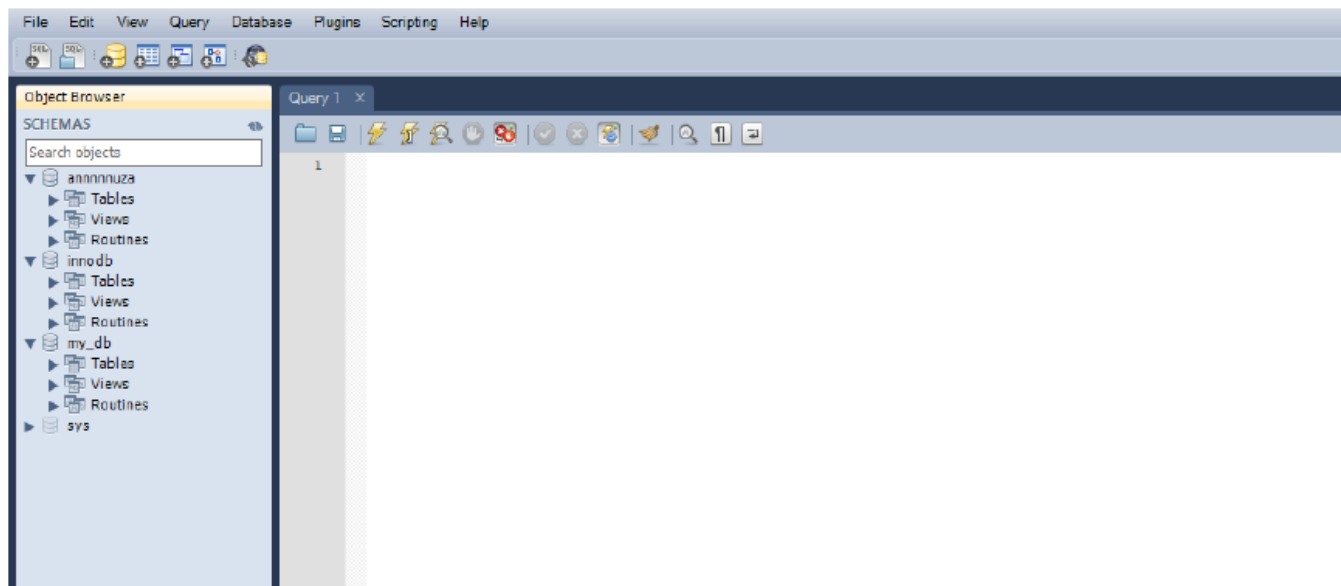


Figure 18