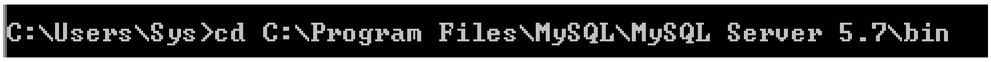
DataBase Testing

Downloading Mysql community server

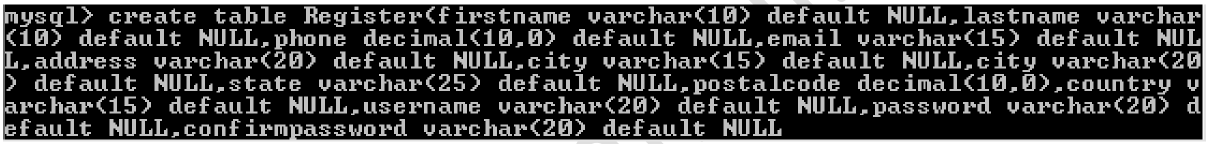


```
C:\Users\Sys>cd C:\Program Files\MySQL\MySQL Server 5.7\bin
```

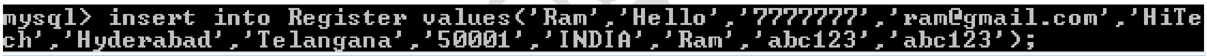
```
C:\Program Files\MySQL\MySQL Server 5.7\bin>
```

Create database “databaseName”;

Use “databaseName”;



```
mysql> create table Register(firstname varchar(10) default NULL,lastname varchar
(10) default NULL,phone decimal(10,0) default NULL,email varchar(15) default NUL
L,address varchar(20) default NULL,city varchar(15) default NULL,city varchar(20
) default NULL,state varchar(25) default NULL,postalcode decimal(10,0),country v
archar(15) default NULL,username varchar(20) default NULL,password varchar(20) d
efault NULL,confirmpassword varchar(20) default NULL
```



```
mysql> insert into Register values('Ram','Hello','7777777','ram@gmail.com','HiTe
ch','Hyderabad','Telangana','50001','INDIA','Ram','abc123','abc123');
```

1. Open google.com→ Search for MySql Installer → Goto Windows(x86,32 bit) MSI installer → click on download → Download and Install it.
2. During installation note down the UserName, Password and the port number
3. Goto All programs → Click on MySql --? Click on MySql Server → Click on MySql command line Client → Enter your Password
4. Type, Showdatabases (this will display all the list of Databases available in MySql)
5. To move into a database type the command “ use databaseName(whatever the name of the database)
6. To create a table in DB
   Goto google and seach for below
   http://justinsomia.org/2009/04/the-emp-and-dept-tables-for-mysql/”
7. Copy the script for creation of Emp and Dept tables and paste it in the MySql command prompt.
8. For java to connect to MySql DB we should download the MySql connector jar and add it to the Project in Eclipse
   Open google → search.maven.org → search for “mysql-connector-java” → Click on the jar link
9. Once the jar file is downloaded add it to the Project in Eclipse

JDBC

JDBC stands for Java DataBase connectivity and Java uses this concept to connect to any DataBase

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There are 5 steps used by a JDBC program

a) Register the Driver class
b) Create connection
c) Create Statement
d) Execute sql Query
e) Close connection with the DataBase

a) Register the Driver class

The "forName()" method present in a class called class is used to Register the driver class. This method is used to load the driver class dynamically

Syntax: class.forName().newInstance()

b) Create the connection

The "getConnection()" present in the driver manager class is used to establish the connection with DB

This method accepts 3 parameters

i. url + Dbname concatinated
ii. Username
iii. Password

Syntax: Driver.Manager.getConnection(url + dbname, username,password)

c) Create the Statement Object

The "**prepateStatement()**" method of the connection interface is used to speciy the SQL query

Syntax: connectionObject.prepareStatement("SQL Query")

d) Execute the Query

The "**executeQuery()**" method present in the prepare statement interface is used to Run the Query.

This method returns a resultset object. This result set object is capable of storing Multiple records.

Syntax: ResultSetObjct = PreparedStatementObject.executeQuery()

e) Closing DB connection

The close() method present in the connection interface is used to close the connection between the Java Program and the DB

Syntax: ConnectionObject.close()

Program to connect to DB and Update the Data in Application and Test

```
Public class DataDrivenTestingUsingDB
{
    FirefoxDriver driver;
@BeforeTest
    Public void SetUp()
  {
```

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```
        driver = new FirefoxDriver();
        driver.get(http://newtours.demoaut.com);
        driver.findElement(By.linkText(“REGISTER”)).click();
     }
    @Test
        Public void dbTest()
      {
        Connection conn=null;
        String url = “jdbc:mysql://localhost:3306/”;
        String dbname = “test”;
        String Dbdriver = “com.mysql.jdbc.Driver”;
        String userName = “root”;
        String password = “srinu4lr”;
    Class.forName(Dbdriver).newInstance();
    conn = DriverManager.getConnection(url+dbName,userName,password);

    PreparedStatement psmt = conn.prepareStatement(“select *from register”);
    ResultSet rs = psmt.executequery();
    While(rs.next())
    {
    driver.findElement(By.name(“fistName”)).sendKeys(rs.getString(1));
    “
    “
    “
    “
    driver.name(“register”).click();
}


}
    conn.close();
```

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