

# MySQL

## BASICS

1. To open through cmd : `mysql -u root -p`
2. To view all available databases : `show databases;`
3. To exit : `EXIT;`
4. To view available users and host : `select user,host from mysql.user;`
5. To add a new user : `create user username identified by 'password';`  
here `username` corresponds `username@hostname` ie it has two parts name and hostname  
eg : `rahul@localhost`
6. To delete a user : `drop user username;`
7. To clear screen press : `ctrl + L`

## DATABASE

1. Creating database : `create database database_name;`
2. Accessing/selecting the database : `use database_name;`
3. Deleting a database : `drop database database_name;`

## TABLES

1. Creating table : `create table tablename( variable_name1 datatype , .....);`
2. To see the structure of the table : `describe table_name;`
3. To insert a complete row : `insert into table_name values(1,"rahul");`
4. To view a table : `select * from table_name;`

## JDBC WITH MySQL

There are 5 steps in connecting java application with MySQL database

### 1. Register the driver class :

The driver class for MySQL database is `com.mysql.jdbc.driver`

```
Class.forName("com.mysql.jdbc.Driver");
```

### 2. Get connection :

connection url for MySql database is `jdbc:mysql://localhost:3306/database_name`

```
Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/  
database_name","username","password");
```

### 3. Create statement :

```
Statement stmt=con.createStatement();
```

### 4. Execute Queries :

```
ResultSet rs=stmt.executeQuery("select * from emp_table");  
while(rs.next())  
System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getInt(3));
```

### 5. Close connection :

```
con.close();
```

## NOTE

Before running the program we need to download MySQL j connector

For linux extract the downloaded mysql j connector and place the java file there. Then load the jar file by setting the classpath as

```
export CLASSPATH=mysql-connector-java-5.1.49.jar:.
```

Now compile and run !!