



Vidyavardhini's College of Engineering and Technology
Department of Artificial Intelligence & Data Science

Experiment No.9
Demonstrate Database connectivity
Date of Performance:
Date of Submission:



Aim :- Write a java program to connect Java application with the MySQL database

Objective :- To learn database connectivity

Theory:

Database used : MySql

1. Driver class: The driver class for the mysql database is `com.mysql.jdbc.Driver`.
2. Connection URL: The connection URL for the mysql database is `jdbc:mysql://localhost:3306/loan management` where `jdbc` is the API, `mysql` is the database, `localhost` is the server name on which `mysql` is running, can also use IP address, `3306` is the port number and `loan management` is the database name.
3. Username: The default username for the mysql database is `Hiren`.
4. Password: It is the password given by the user at the time of installing the mysql database. Password used is “ “.

To connect a Java application with the MySQL database, follow the following steps.

- First create a database and then create a table in the mysql database.
- To connect java application with the mysql database, `mysqlconnector.jar` file is required to be loaded.
- download the jar file `mysql-connector.jar`
- add the jar file to the same folder as the java program.
- Compile and run the java program to retrieve data from the database.

Conclusion: Data has been retrieved successfully from a table by establishing database connectivity of java program with mysql database.

2. Explain steps to connect a java application with the MySQL database
 - Download and install MySQL Connector/J.
 - Include the MySQL Connector/J JAR file in your Java project.
 - Import the necessary classes from the `'java.sql'` package.
 - Use the `'DriverManager.getConnection()'` method to establish a connection to the MySQL database.
 - Provide the JDBC URL, username, and password for authentication.
 - Perform database operations using `'Statement'` or `'PreparedStatement'` objects.
 - Close the connection and resources after completing the database operations.