Practical No.9

Aim: Implementation of Java Database Connectivity

Resources Required: NetBeans IDE 8.0.1

Theory:

A database is a collection of information that is organized so that it can be easily accessed, managed and updated.

JDBC stands for Java Database Connectivity. JDBC is a Java API to connect and execute the query with the database. It is a part of JavaSE (Java Standard Edition). JDBC API uses JDBC drivers to connect with the database.

Steps for Creating Database in NetBeans IDE 8.0.1

- 1) Click on Service tab
- 2) Expand Database option
- 3) Right Click on Java DB and then click on CreateDatabase
- 4) Specify Database Name, User name and password and click on OKbutton Practical No.2
- 5) Right Click on jdbc:derby//localhost:1527/Library and click on connect option 6) Expand your Database.
- 6) Click on Project tab and create new Java application.
- 7) Write following code in java class.
- 8) Attach Java DB driver in library
- 9) Run the program

Source Code:

```
package javaapplication1;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
public class JavaApplication1 {
    public static void main(String[] args) throws SQLException {
        Connection
        con=DriverManager.getConnection("jdbc:derby://localhost:1527/college","meet","meet");
        System.out.println("Connection created");
        java.sql.Statement stmt=con.createStatement();
        System.out.println("Statement created");
```

stmt.executeUpdate("create table library(sname varchar(10),rollno int,gender varchar(10),class varchar(10),bookname varchar(10),authorname varchar(10),issuedate varchar(10),returndate varchar(10))");

```
System.out.println("table created");
stmt.executeUpdate("insert into library values('meet',1,'male','sy','java','gauri','2 feb','9 feb')");
System.out.println("Record inserted");
}
Output:
run:
Connection created
Statement created
table created
Record inserted
```

BUILD SUCCESSFUL (total time: 1 second)