

EXPERIMENT NO. 4

CODE:

```
package jdbcapp;
import java.sql.*;
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.util.logging.Level;
import java.util.logging.Logger;
public class JDBCApp {
    public static void main(String[] args) {

        //For connection Object
        String user="root";
        String password="root";
        String
        URL="jdbc:mysql://localhost:3306/adjavadb?characterEncoding=utf8";

        try {
            Class.forName("com.mysql.jdbc.Driver");

            Connection con      =
            DriverManager.getConnection(URL,user,password);
            if (con!=null){
                System.out.println("\nConnection Established with database");
            }
            else
                System.out.println("\nConnection Failed!!!");

            // For retriving data
            String query;
            Statement stmt;
            ResultSet set;
            query = "select * from employee";
            stmt=con.createStatement();
            set = stmt.executeQuery(query);
            while(set.next()){
                int id=set.getInt(1);
                String name = set.getString(2);
                int salary = set.getInt(3);
                System.out.println("Employee details: "+ "\nID: "+id+"\nName:
                "+name+"\nSalary: "+salary);
            }
            // For data insertion
            //Using prepared statement for data insertion, Match the column
            names
```

```

        BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));
        String q = "insert into employee(Employeeid,EmployeeName,Salary)
value(?,?,?)";

        PreparedStatement pstmt = con.prepareStatement(q);
        System.out.println("Enter the Employee ID: ");
        String id1 = br.readLine();
        System.out.println("Enter name of employee: ");
        String name1 = br.readLine();
        System.out.println("Enter the salary: ");
        String salary1 = br.readLine();

        pstmt.setString(1, id1);
        pstmt.setString(2, name1);
        pstmt.setString(3, salary1);

        pstmt.executeUpdate();
        System.out.println("\nDatabase Updated sucessfully");

        //For retriving perticular data
        BufferedReader br1 = new BufferedReader(new
InputStreamReader(System.in));
        String query1;
        Statement stmt1;
        ResultSet set1;
        System.out.println("Enter the id: ");
        String id2 = br1.readLine();
        query1 = "select * from employee where Employeeid="+id2;
        stmt1=con.createStatement();
        set1 = stmt1.executeQuery(query1);
        while(set1.next()){
            int id3=set1.getInt(1);
            String name3 = set1.getString(2);
            int salary3 = set1.getInt(3);
            System.out.println("Employee details: "+"\\nId: "+id3+"\\nName:
"+name3+"\\nSalary: "+salary3);
        }
    } catch (ClassNotFoundException ex) {
        Logger.getLogger(JDBCApp.class.getName()).log(Level.SEVERE, null,
ex);
    } catch (SQLException ex) {
        Logger.getLogger(JDBCApp.class.getName()).log(Level.SEVERE, null,
ex);
    } catch (IOException ex) {
        Logger.getLogger(JDBCApp.class.getName()).log(Level.SEVERE, null,
ex);
    }
}
}
}

```

OUTPUT:

1. Connecting with database and Retrieving data

```
Output - JDBCApp (run)
run:
Connection Established with database
Employee details:
ID: 1
Name: Akash
Salary: 1000
Employee details:
ID: 2
Name: Anish
Salary: 2000
BUILD SUCCESSFUL (total time: 0 seconds)
```

2. Inserting data

```
Connection Established with database
Employee details:
ID: 1
Name: Akash
Salary: 1000
Employee details:
ID: 2
Name: Anish
Salary: 2000
Employee details:
ID: 4
Name: try
Salary: 5000
Enter the Employee ID:
BUILD STOPPED (total time: 5 seconds)
|
```

3. Retrieving particular data

```
Database Updated sucessfully
Enter the id:
8
Employee details:
Id: 8
Name: ross
Salary: 50000
BUILD SUCCESSFUL (total time: 20 seconds)
|
```