// 31139 – Durvesh – DBMSLC2

// Sample Code

```java
package mysqljava;

import java.sql.*;
import java.util.ArrayList;
import java.util.Scanner;

public class Main {

    public static void main(String[] args) throws ClassNotFoundException,
SQLException {
        Statement stmt;
        Scanner scanner = new Scanner(System.in);
        ResultSet rs;
        String username, pass, url;
        Connection con;
        url = "jdbc:mysql://localhost:3306/c2";
        Class.forName("com.mysql.cj.jdbc.Driver");
        username = "root";
        pass = "mysql";
        con = DriverManager.getConnection(url, username, pass);
        stmt = con.createStatement();
        System.out.println("-------------Welcome to Employee Database!-----------
");
        int basechoice = 0,subchoice;
        while(basechoice!=5){
            System.out.println("1. View Database   2. Insert Record   3. Update
Records  4. Delete Records  5. Exit");
            basechoice = scanner.nextInt();
            switch (basechoice){
                case 1:
                    System.out.println("1. Show all  2. Show Selective");
                    subchoice = scanner.nextInt();
                    switch (subchoice){
                        case 1:
                            rs = stmt.executeQuery("SELECT * from employee");
                            while(rs.next()){
                                System.out.println(rs.getString(1)+" \t\t -
"+rs.getInt(2)+
                                        " \t\t -  "+rs.getInt(3)+" \t\t -
"+rs.getString(4));
                            }
                            break;
                        case 2:
                            scanner.nextLine();
                            int whereflag=0;
                            System.out.println("Enter your where column");
                            String wherecolumn = scanner.nextLine();
if(wherecolumn.equals("name")||wherecolumn.equals("city")){
                                whereflag=1;
                            }
                            System.out.println("Enter your where condition e.g
>,=,<");
                            String wherecondition = scanner.nextLine();
                            System.out.println("Enter your where value");
                            String where = scanner.nextLine();
                            if(whereflag==1){
                                where = "\""+where+"\"";
                            }
                            rs = stmt.executeQuery("SELECT * from employee WHERE
```

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                                "+wherecolumn+wherecondition+where+";");
                                while(rs.next()){
                                    System.out.println(rs.getString(1)+" \t\t -
"+rs.getInt(2)+
                                        " \t\t -  "+rs.getInt(3)+" \t\t -
"+rs.getString(4));
                                }
                                break;
                        }
                        break;
                    case 2:
                        scanner.nextLine();
                        System.out.print("Enter Name: ");
                        String employeename = scanner.nextLine();
                        System.out.print("Enter EmployeeID: ");
                        int id = scanner.nextInt();
                        System.out.print("Enter Salary: ");
                        int salary = scanner.nextInt();
                        System.out.print("Enter City: ");
                        scanner.nextLine();
                        String city = scanner.nextLine();
                        stmt.executeUpdate("INSERT INTO employee values
(\""+employeename+"\","+id+","+salary+",\""+city+"\");");
                        System.out.println("------------Entry inserted-------------
");
                        break;
                    case 3:
                        scanner.nextLine();
                        System.out.println("Enter Column to be updated");
                        String updatecolumn = scanner.nextLine();
                        int flag =0;
                        if(updatecolumn.equals("name")||updatecolumn.equals("city")){
                            flag=1;
                        }
                        System.out.println("1. Update all  2. Update Selective");
                        subchoice = scanner.nextInt();
                        switch (subchoice){
                            case 1:
                                scanner.nextLine();
                                System.out.println("Enter new value of the column");
                                String value = scanner.nextLine();
                                if(flag==1){
                                    value = "\""+value+"\"";
                                }
                                stmt.executeUpdate("UPDATE employee SET
"+updatecolumn+"="+value+";");
                                System.out.println("-------------Values Updated--------
-----");
                                break;
                            case 2:
                                scanner.nextLine();
                                int whereflag=0;
                                System.out.println("Enter your where column");
                                String wherecolumn = scanner.nextLine();
if(wherecolumn.equals("name")||wherecolumn.equals("city")){
                                    whereflag=1;
                                }
                                System.out.println("Enter your where condition e.g
>,=,<");
                                String wherecondition = scanner.nextLine();
                                System.out.println("Enter your where value");
                                String where = scanner.nextLine();
                                if(whereflag==1){
                                    where = "\""+where+"\"";
                                }
                                System.out.println("Enter new value of the column");
                                String newvalue = scanner.nextLine();
```

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                                    if(flag==1){
                                        newvalue = "\""+newvalue+"\"";
                                    }
                                    stmt.executeUpdate("UPDATE employee SET "+
                                            updatecolumn+"="+newvalue+" WHERE
"+wherecolumn+wherecondition+where+";");
                                    System.out.println("-------------Values Updated--------
-----");
                                    break;
                            }
                            break;
                    case 4:
                        System.out.println("1. Delete all  2. Delete Selective");
                        subchoice = scanner.nextInt();
                        switch (subchoice){
                            case 1:
                                stmt.executeUpdate("DELETE FROM employee;");
                                System.out.println("-------------Values Deleted--------
-----");
                                break;
                            case 2:
                                scanner.nextLine();
                                int whereflag=0;
                                System.out.println("Enter your where column");
                                String wherecolumn = scanner.nextLine();
if(wherecolumn.equals("name")||wherecolumn.equals("city")){
                                    whereflag=1;
                                }
                                System.out.println("Enter your where condition e.g
>,=,<");
                                String wherecondition = scanner.nextLine();
                                System.out.println("Enter your where value");
                                String where = scanner.nextLine();
                                if(whereflag==1){
                                    where = "\""+where+"\"";
                                }
                                stmt.executeUpdate("DELETE FROM employee WHERE
"+wherecolumn+wherecondition+where+";");
                                System.out.println("-------------Values Deleted--------
-----");
                                break;
                            }
                            break;
                    case 5:
                        break;
                    }
                }
            }
}
```

// Outputs

```
"D:\Program Files\Java\jdk-12.0.1\bin\java.exe" "-javaagent:D:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2020.2.2\lib\idea_
-------------Welcome to Employee Database!-----------
1. View Database   2. Insert Record   3. Update Records   4. Delete Records   5. Exit
1

1. Show all  2. Show Selective
1

John        -  3424       -  60000     -  NYC
Jane        -  9809       -  70000     -  NYC
Ram         -  1809       -  50000     -  Pune
Sham        -  2340       -  55000     -  Mumbai
1. View Database   2. Insert Record   3. Update Records   4. Delete Records   5. Exit
1

1. Show all  2. Show Selective
2

Enter your where column
salary
Enter your where condition e.g >,=,<
>
Enter your where value
55000
John        -  3424       -  60000     -  NYC
Jane        -  9809       -  70000     -  NYC
1. View Database   2. Insert Record   3. Update Records   4. Delete Records   5. Exit
2

Enter Name: Anna
```



```
Jane        -  9809       -  70000     -  NYC
1. View Database   2. Insert Record   3. Update Records   4. Delete Records   5. Exit
2

Enter Name: Anna
Enter EmployeeID: 6986
Enter Salary: 90000
Enter City: LA
-------------Entry inserted-------------
1. View Database   2. Insert Record   3. Update Records   4. Delete Records   5. Exit
1

1. Show all  2. Show Selective
1

John        -  3424       -  60000     -  NYC
Jane        -  9809       -  70000     -  NYC
Ram         -  1809       -  50000     -  Pune
Sham        -  2340       -  55000     -  Mumbai
Anna        -  6986       -  90000     -  LA
1. View Database   2. Insert Record   3. Update Records   4. Delete Records   5. Exit
3

Enter Column to be updated
salary

1. Update all  2. Update Selective
2

Enter your where column
```

```
1. Update all  2. Update Selective
2
Enter your where column
city
Enter your where condition e.g >,=,<
=
Enter your where value
NYC
Enter new value of the column
100000
------------Values Updated------------
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
1
1. Show all  2. Show Selective
1
John       -  3424    -  100000   -  NYC
Jane       -  9809    -  100000   -  NYC
Ram        -  1809    -  50000    -  Pune
Sham       -  2340    -  55000    -  Mumbai
Anna       -  6986    -  90000    -  LA
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
3
Enter Column to be updated
city
1. Update all  2. Update Selective
```



```
3
Enter Column to be updated
city
1. Update all  2. Update Selective
1
Enter new value of the column
London
------------Values Updated------------
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
1
1. Show all  2. Show Selective
1
John       -  3424    -  100000   -  London
Jane       -  9809    -  100000   -  London
Ram        -  1809    -  50000    -  London
Sham       -  2340    -  55000    -  London
Anna       -  6986    -  90000    -  London
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
4
1. Delete all  2. Delete Selective
2
Enter your where column
name
Enter your where condition e.g >,=,<
```

```
Enter your where column
name
Enter your where condition e.g >,=,<
=
Enter your where value
John
-------------Values Deleted-------------
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
1
1. Show all  2. Show Selective
1
Jane       -  9809     -  100000   -  London
Ram        -  1809     -  50000    -  London
Sham       -  2340     -  55000    -  London
Anna       -  6986     -  90000    -  London
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
4
1. Delete all  2. Delete Selective
1
-------------Values Deleted-------------
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
1
1. Show all  2. Show Selective
1
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
```

```
John
-------------Values Deleted-------------
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
1
1. Show all  2. Show Selective
1
Jane       -  9809     -  100000   -  London
Ram        -  1809     -  50000    -  London
Sham       -  2340     -  55000    -  London
Anna       -  6986     -  90000    -  London
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
4
1. Delete all  2. Delete Selective
1
-------------Values Deleted-------------
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
1
1. Show all  2. Show Selective
1
1. View Database   2. Insert Record   3. Update Records  4. Delete Records  5. Exit
5

Process finished with exit code 0
```