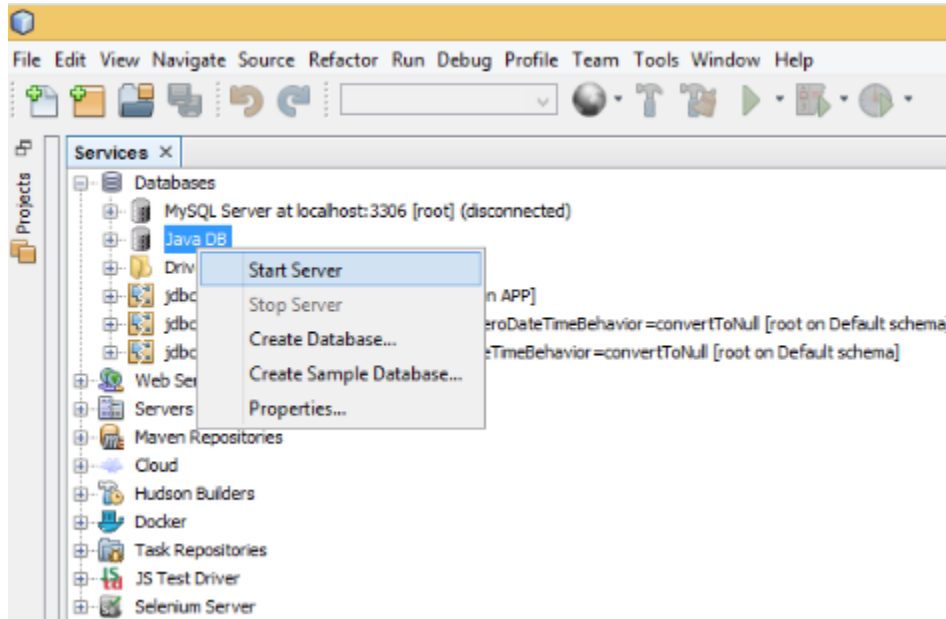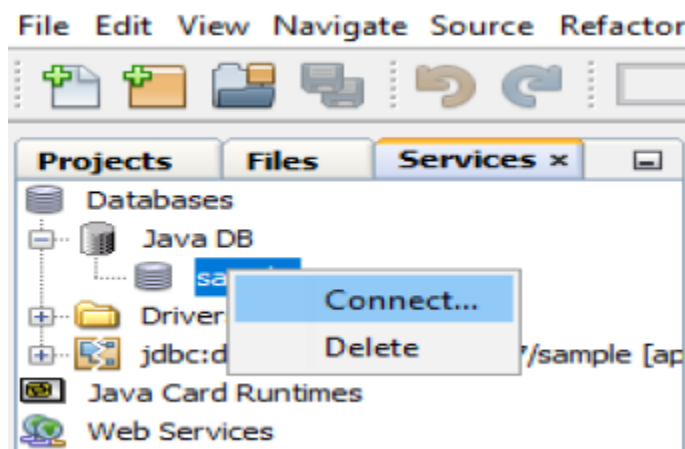# Practical:3

Aim: Define a web service method that returns the contents of a database in a JSON string. The contents should be displayed in a tabular format.

Step 1: click on the services > Databases . **Right click on Java DB** and then **click on Start Server** to start the server .
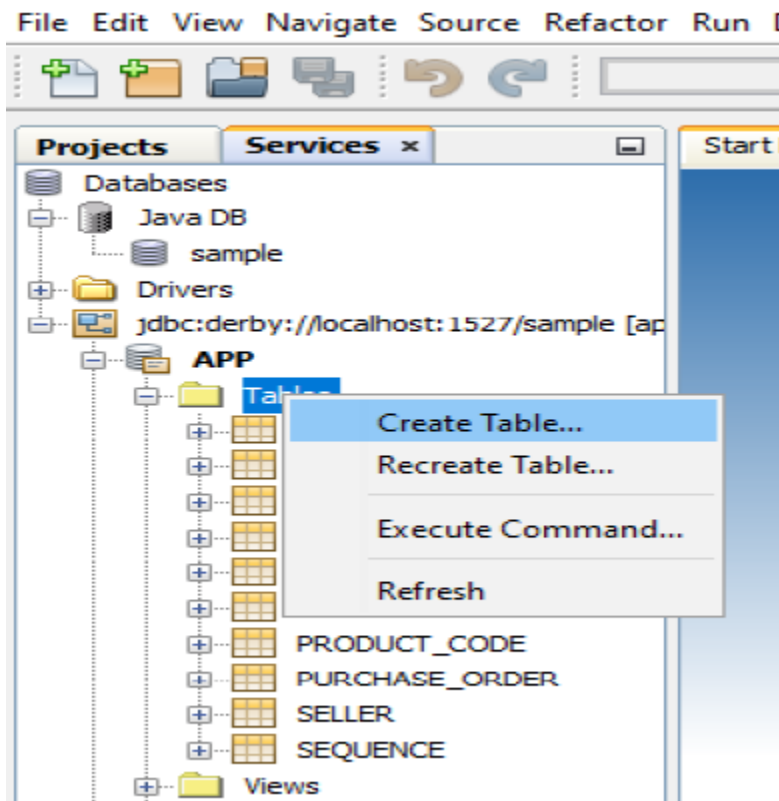

2) Now expand Java DB and **right click on sample** and then **click on connect** to connect the sample database with server.
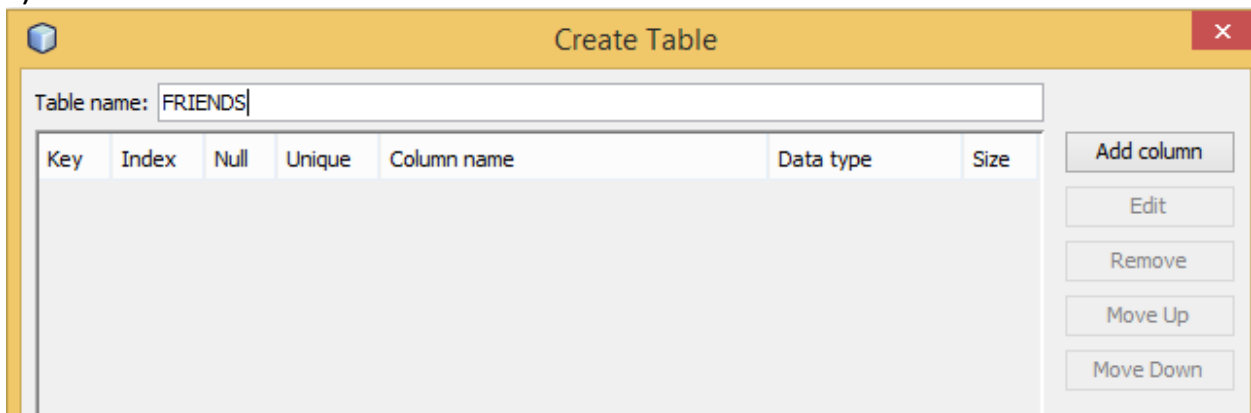

3) Now we are going to create a table in default database **sample**.
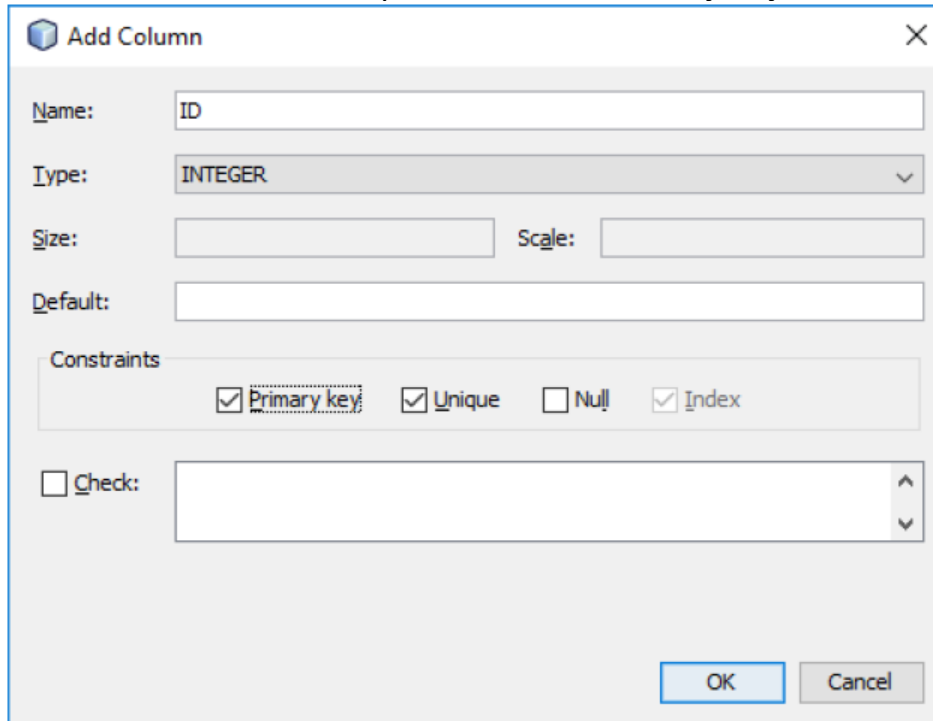
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Right click on Table -> Create Table
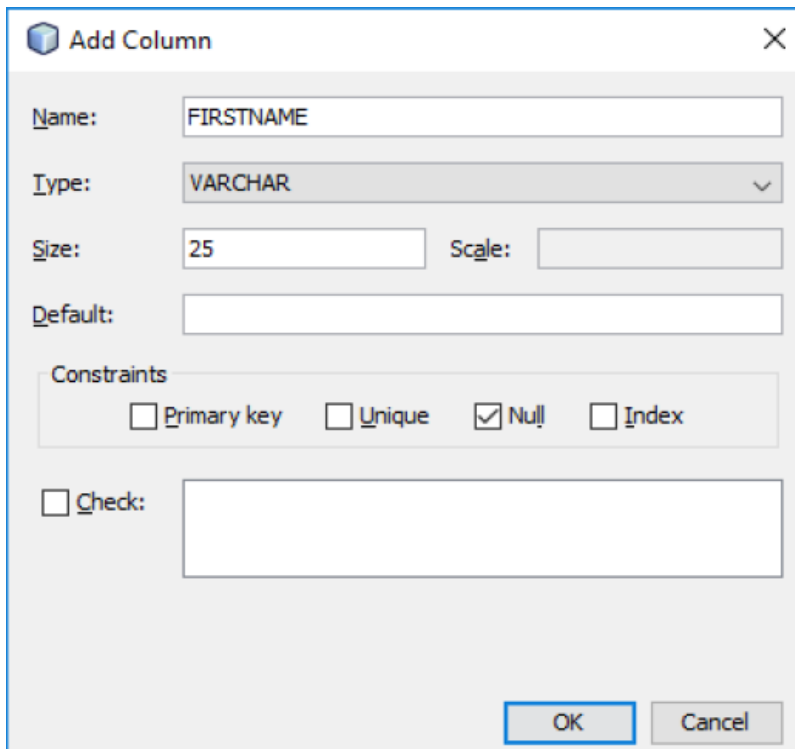

4) Give **table name** as **FRIENDS**.

5) Now **click on Add column** button **to add columns** in table.
Enter details as in below pic and **select Primary key**. After that **click on OK** button.

6) Now **add second column** with following detail. But **don't select primary** and click on OK button.

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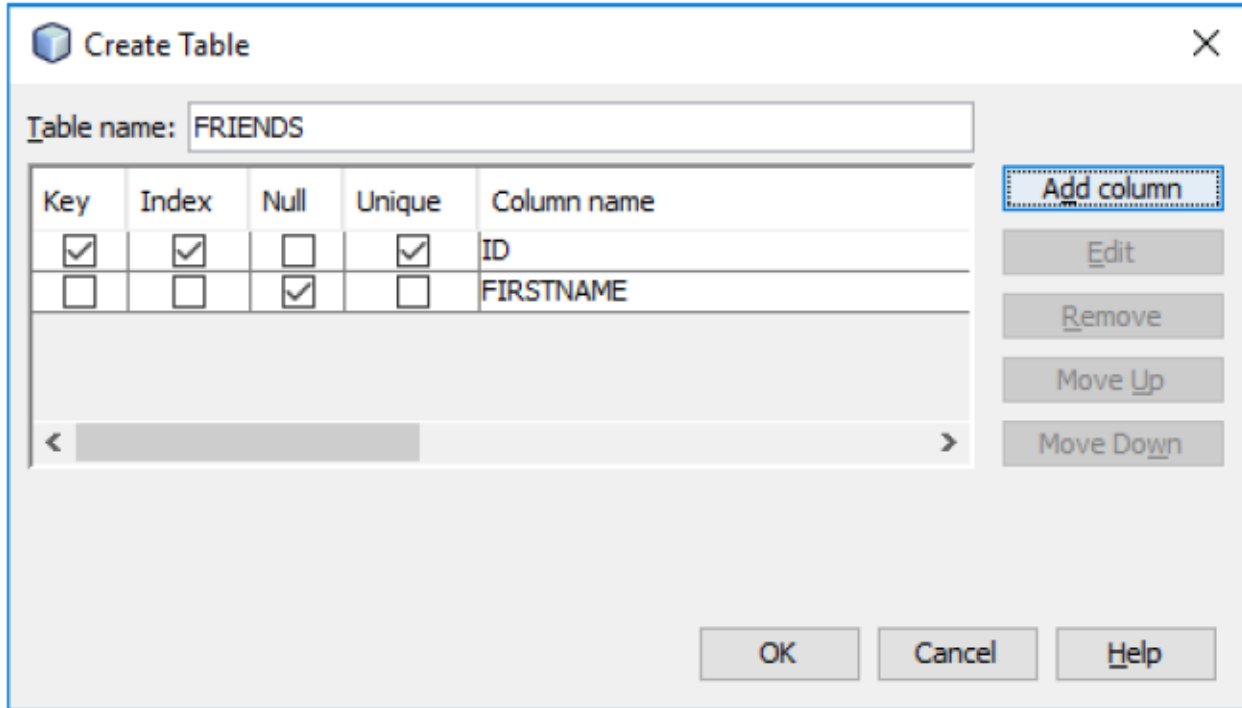7) Now **click on OK** button.

8) Now you can see a table with name **FRIENDS** in the table.
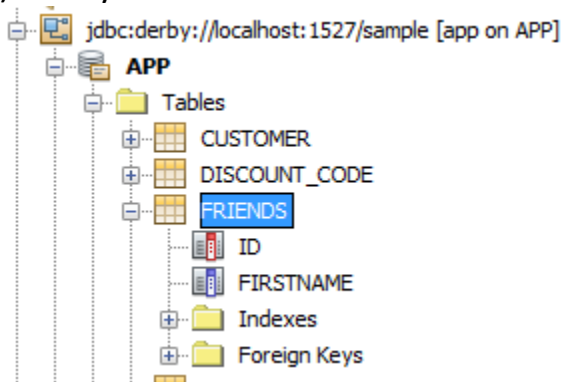
9) **Right click on FRIENDS to view and add records** into it.

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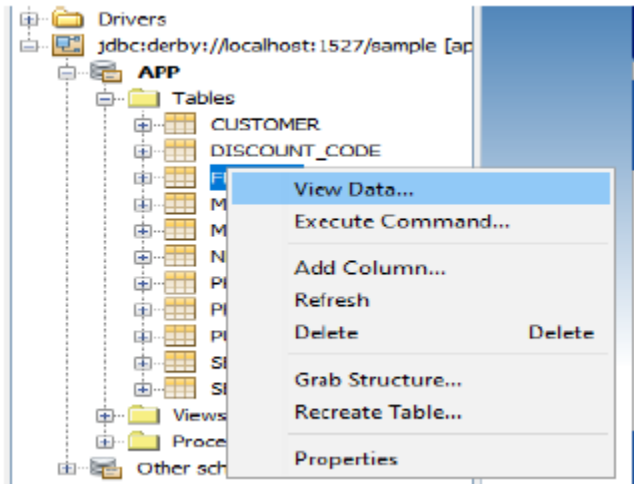
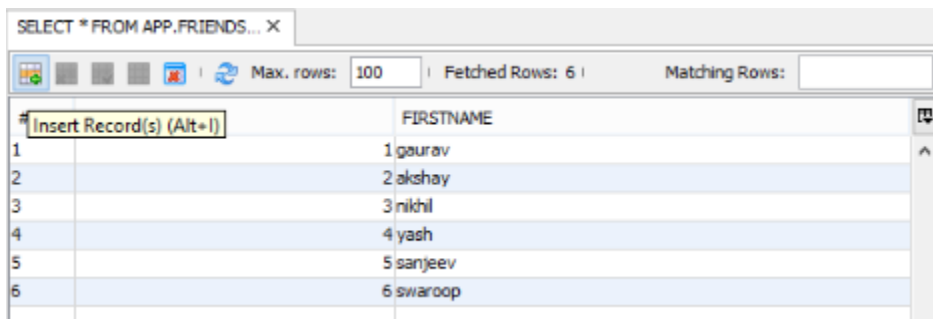

10) Now **click on the leftmost icon in second panel to insert some record**. **Insert a record** and then **click on Add Row button to insert more record**. After that **click on OK button** to finish.

11) Now **create a web application** with name **Server**. After that **click on Next and then Finish** button.
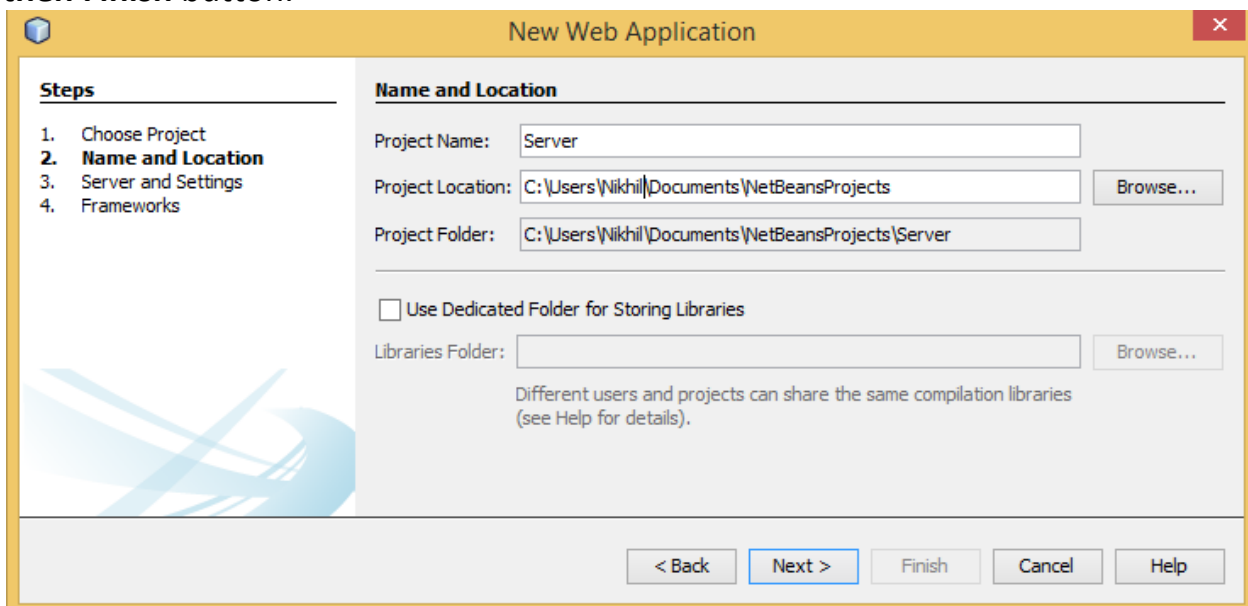
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12) Now create a RESTful Web Service from Database by right click on project name.
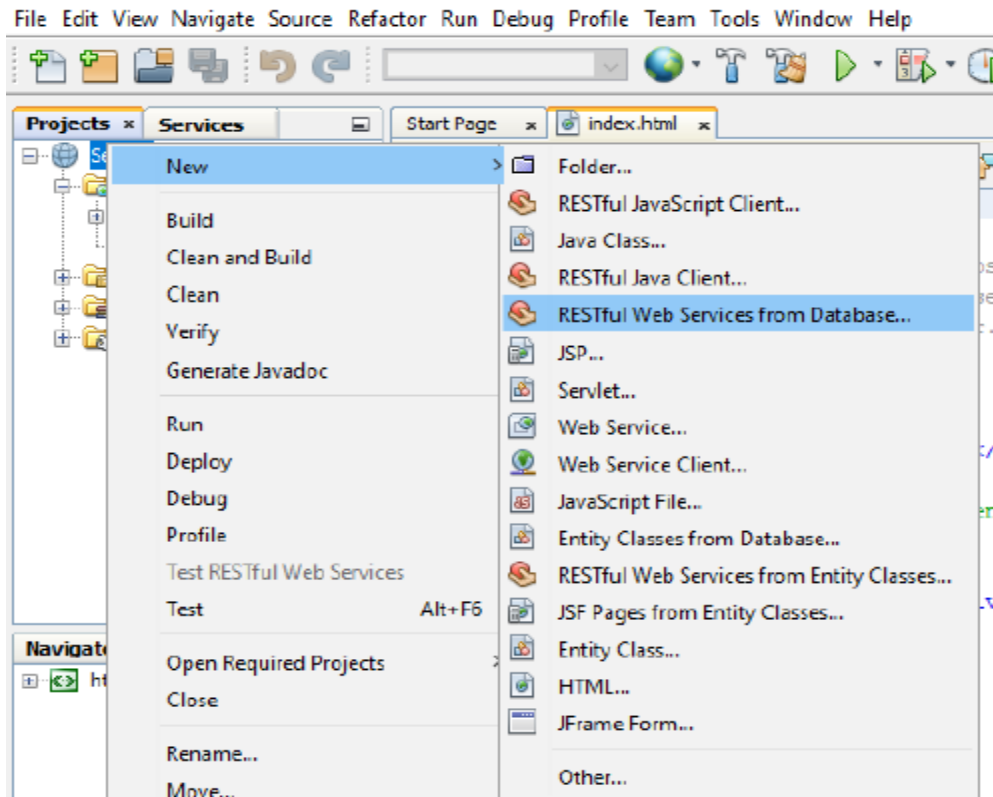
13) Choose Data Source jdbc/sample.

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14) Now select FRIENDS and click on Add button. After that click on Next button.

15) Enter Package name as com.kk and click on Next button and then Finish.

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16) Now **open selected file by double click** on it.
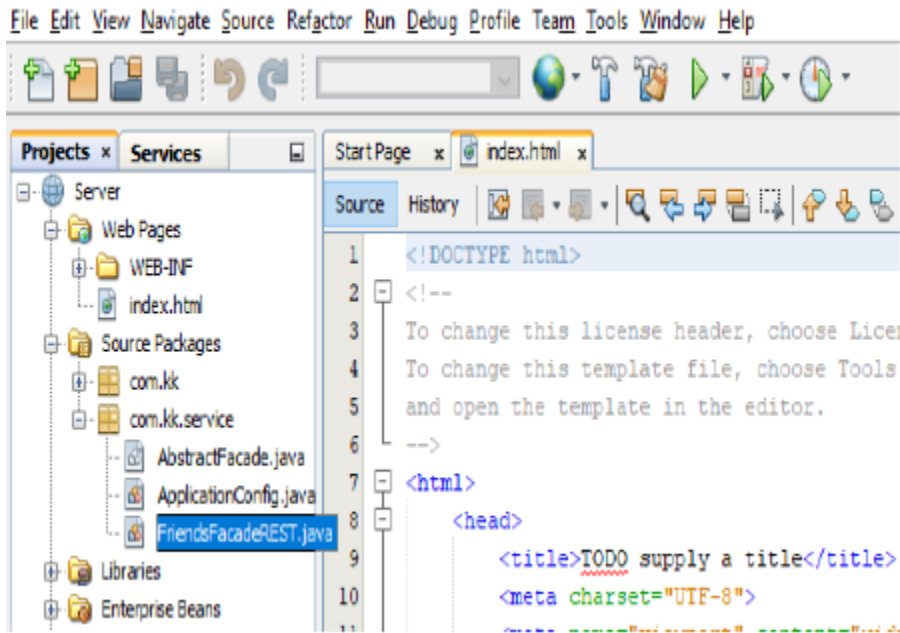
17) Now **remove the selected part from every method in this file**. So that it will communicate only in JSON format. You can also use methods to convert it. But this is easiest method.

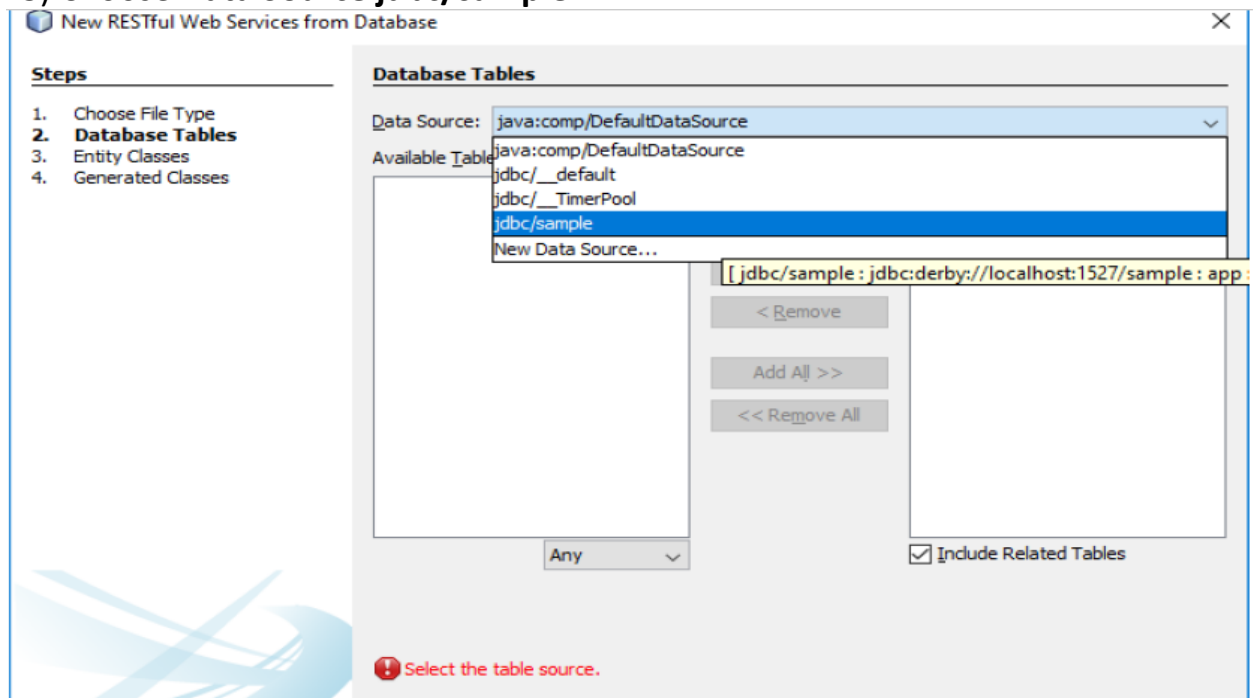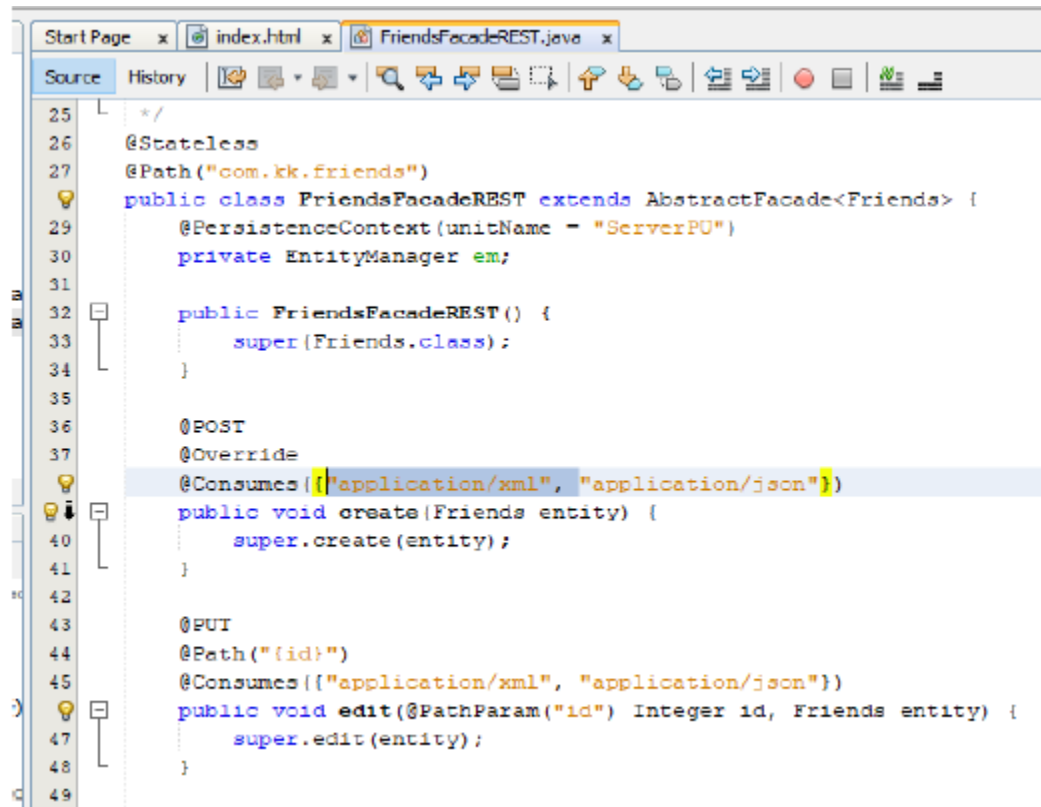# Practical:3

18) After that **right click on project name and Deploy** it.
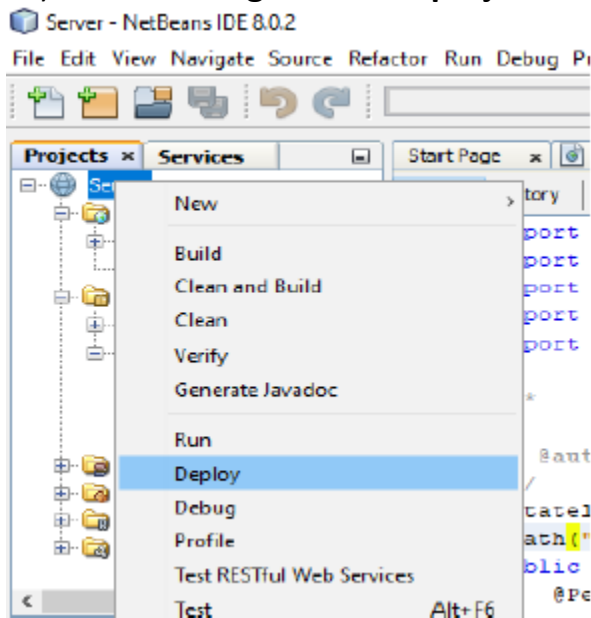
19) Now **create one more Web Application** as **Client**. After that **click on Next** and then **Finish** button.
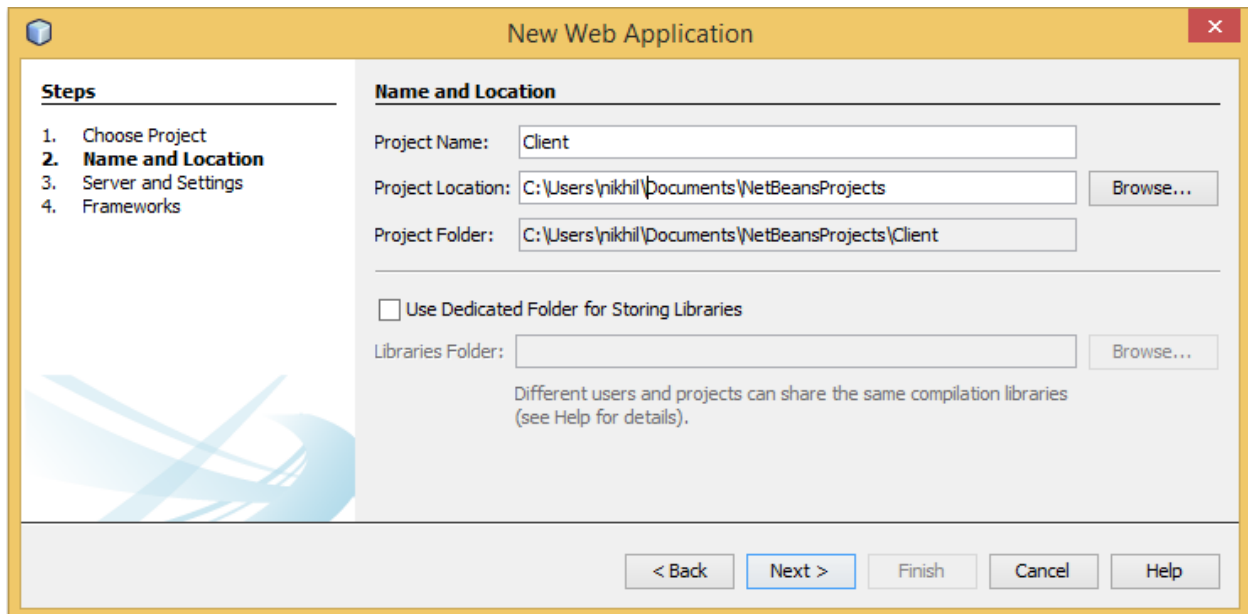
20) Now **open the index.html file of Client project** and **add the following code in between HEAD tag**.
Code:
```
<html>
  <head>
```

```
    <title>TODO supply a title</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <style>
table {
font-family: arial, sans-serif;
border-collapse: collapse;
}
td, th {
border: 1px solid #000000;
text-align: center;
padding: 8px;
}
</style>
<script>
var request = new XMLHttpRequest();
request.open('GET',
'http://localhost:8080/server/webresources/com.kk/friends/', true);
request.onload = function () {
// begin accessing JSON data here
var data = JSON.parse(this.response);
for (var i = 0; i < data.length; i++) {
var table = document.getElementById("myTable");
var row = table.insertRow();
var cell1 = row.insertCell(0);
var cell2 = row.insertCell(1);
cell1.innerHTML = data[i].ID;
cell2.innerHTML = data[i].FIRSTNAME;
}
};
request.send();
</script>
    </head>
    <body>
      <table id="myTable">
        <tr>
        <th> ID</th>
        <th>NAME</th>
```
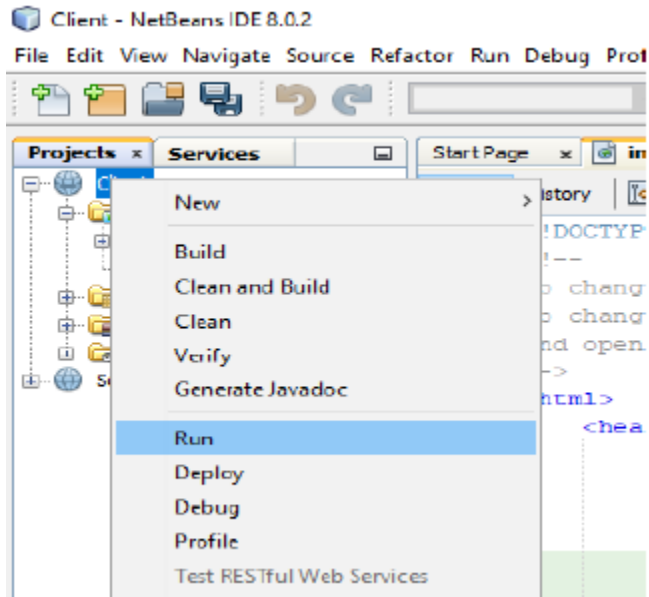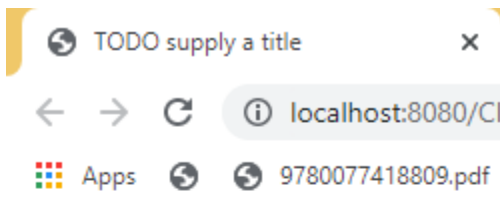
```
        </tr>
      </table>
    </body>
</html>
```

21) Now **run** the **Client** Web Application.

22) A window will open in browser which represents a data in tabular format.
These **data are the records entered in FRIEND table**.

ID	NAME
1	gaurav
2	akshay
3	Nikhil
4	yash
5	sanjeev
6	swaroop