

LAB SESSION 6 SPRING REST API

- By Gayathri Balachandran

1) MySQL tables and data insertion statements:

The screenshot shows a SQL script editor with the following content:

```
4 • SELECT * FROM studentmgmt.student;
5
6
7 • use studentmgmt;
8 • insert into roles values(1,'ADMIN');
9 • insert into roles values(2,'USER');
10 • insert into users values(1,"$2a$12$PwID7p8SbyknG8sT9OKykeCzv28IuJiRkUrcfuffPfjSfzWZKT4m","admin");
11 • insert into users values(2,"$2a$12$Tt18vmPhAt7wixKw9m180FW15RrMQYwt5UP1qV/aXcW596v3wF/6","user");
12 • insert into users_roles values (1,1);
13 • insert into users_roles values (1,2);
14 • insert into users_roles values (2,2);
15
```

The result grid shows the following data:

id	country	course	first_name	last_name
1	India	B.Tech	Suresh	Reddy
2	Canada	B.Arch	Murali	Mohan
3	New Zealand	B.Tech	Daniel	Denson
4	United States	B.Com	Tanya	Gupta

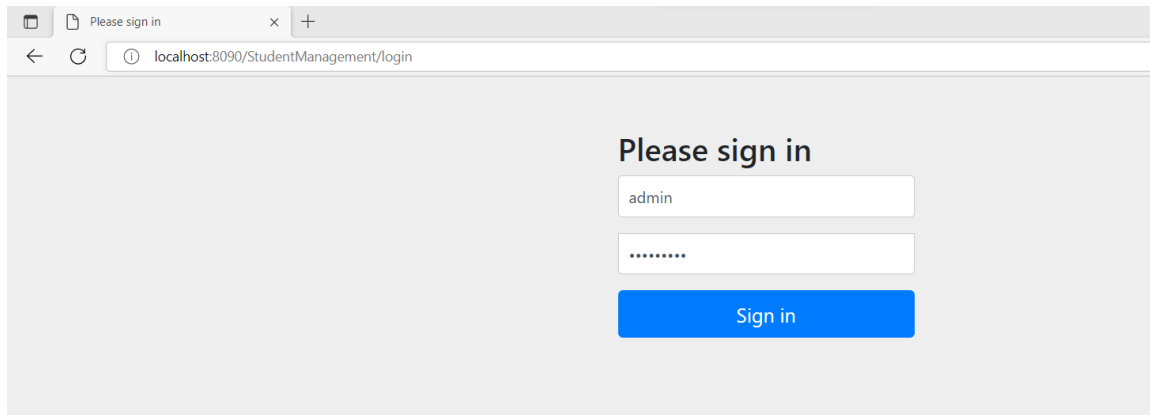
2) application.properties:

The screenshot shows the Eclipse IDE with the following content in the application.properties file:

```
1 server.port=8090
2 spring.jpa.hibernate.ddl-auto=update
3 spring.datasource.url=jdbc:mysql://localhost:3306/studentmgmt
4 spring.datasource.username=root
5 spring.datasource.password=T@mmY021
6
7 spring.jpa.show-sql=true
8 spring.jpa.properties.hibernate.format_sql=true
9 server.servlet.context-path=/StudentManagement
10
11 spring.mvc.view.prefix=/WEB-INF/views/
12 spring.mvc.view.suffix=.jsp
13
14 #password for admin in mysql is admin6as5
15 #password for user in mysql is user6as5
```

CRUD OPERATIONS TESTING USING ADMIN role ACCESS:

1. Login using admin credentials : admin / admin6as5

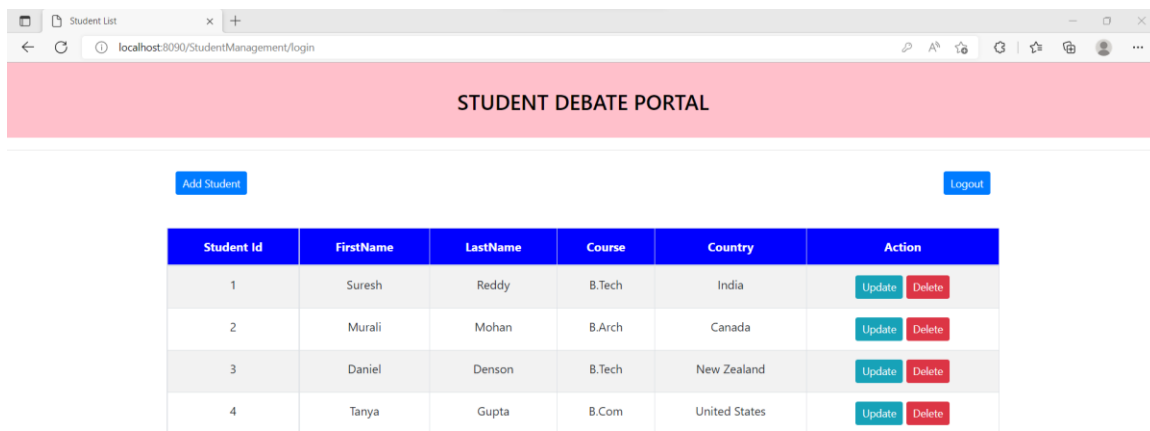


Please sign in

admin

Sign in

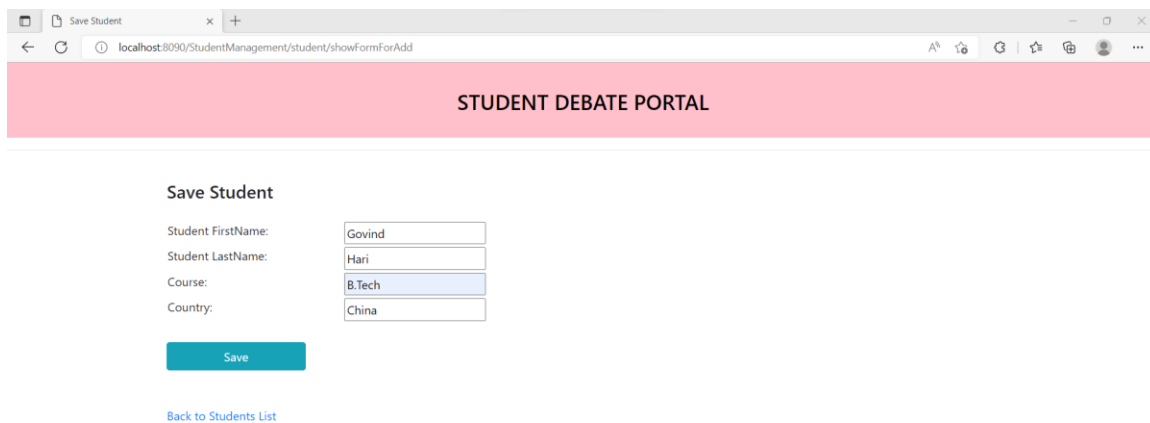
We get the list of all students in the DB. All records are fetched and displayed on UI.



Student Id	FirstName	LastName	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	Update Delete
2	Murali	Mohan	B.Arch	Canada	Update Delete
3	Daniel	Denson	B.Tech	New Zealand	Update Delete
4	Tanya	Gupta	B.Com	United States	Update Delete

2. ADDING A STUDENT:

Click on Add Student



Save Student

Student FirstName: Govind

Student LastName: Hari

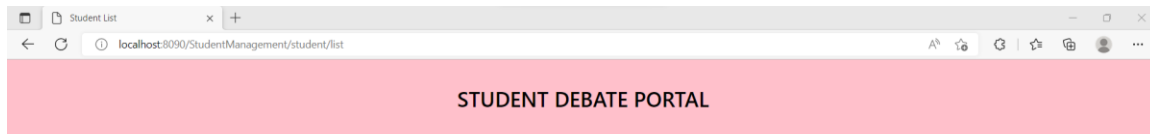
Course: B.Tech

Country: China

Save

[Back to Students List](#)

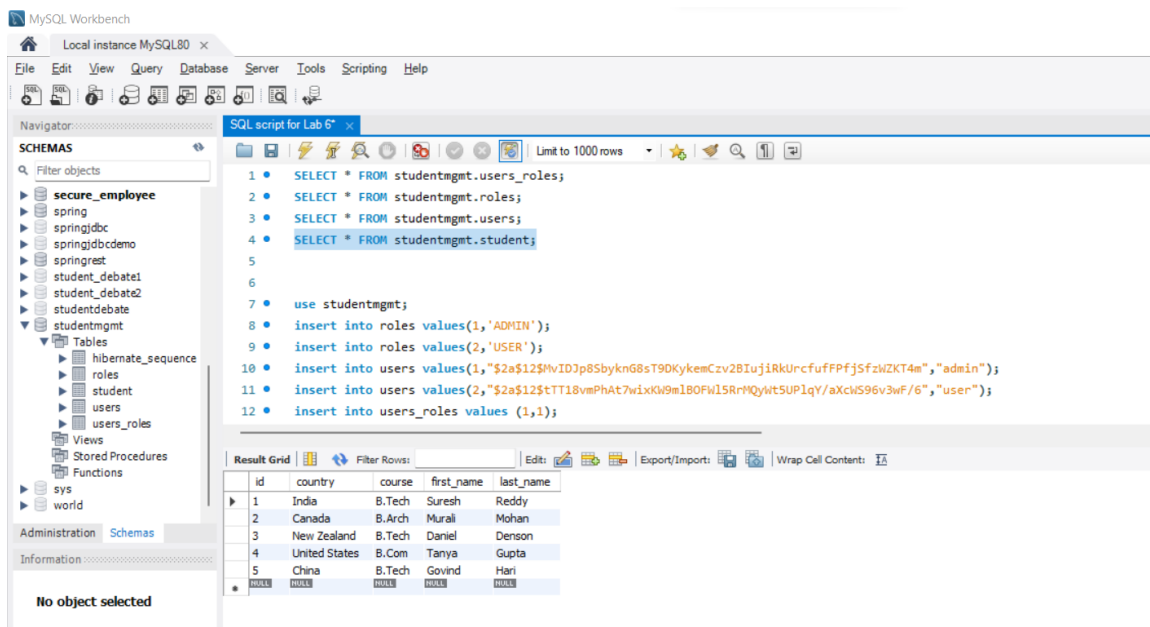
Click on Save



<div>Add Student</div> <div>Logout</div>					
Student Id	FirstName	LastName	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	<div>Update</div> <div>Delete</div>
2	Murali	Mohan	B.Arch	Canada	<div>Update</div> <div>Delete</div>
3	Daniel	Denson	B.Tech	New Zealand	<div>Update</div> <div>Delete</div>
4	Tanya	Gupta	B.Com	United States	<div>Update</div> <div>Delete</div>
5	Govind	Hari	B.Tech	China	<div>Update</div> <div>Delete</div>

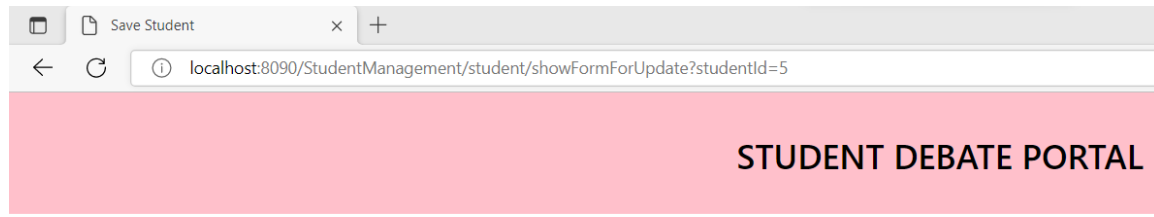
We see that the new record has been added on the UI

We can also cross-check in DB if the data is persisted :



UPDATING AN EXISTING RECORD:

Click on Update Button :

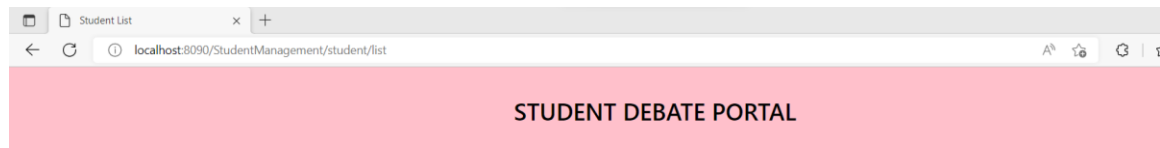


Save Student

Student FirstName:	<input type="text" value="Govindan"/>
Student LastName:	<input type="text" value="Hari"/>
Course:	<input type="text" value="B.Tech"/>
Country:	<input type="text" value="China"/>

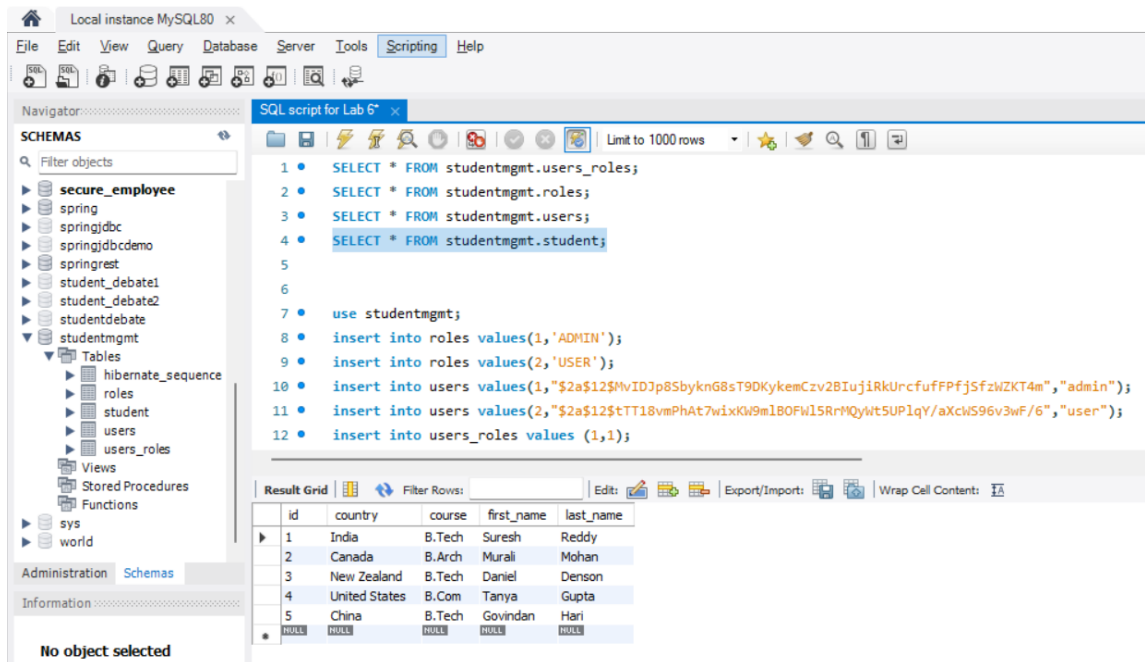
Save

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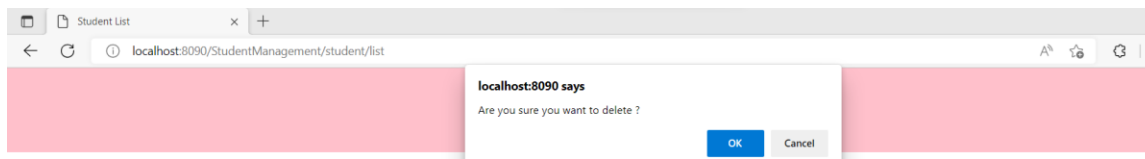
STUDENT DEBATE PORTAL					
Add Student		Logout			
Student Id	FirstName	LastName	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	Update Delete
2	Murali	Mohan	B.Arch	Canada	Update Delete
3	Daniel	Denson	B.Tech	New Zealand	Update Delete
4	Tanya	Gupta	B.Com	United States	Update Delete
5	Govindan	Hari	B.Tech	China	Update Delete

We can see that the **FirstName** is updated now. We can verify the same in the DB:



DELETING A RECORD

Click on Delete button, we get the message : Are you sure you want to delete ?

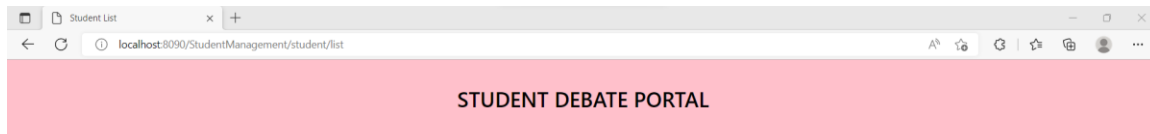


Add Student Logout

Student id	FirstName	LastName	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	Update Delete
2	Murali	Mohan	B.Arch	Canada	Update Delete
3	Daniel	Denson	B.Tech	New Zealand	Update Delete
4	Tanya	Gupta	B.Com	United States	Update Delete
5	Govindan	Hari	B.Tech	China	Update Delete

Click on OK,

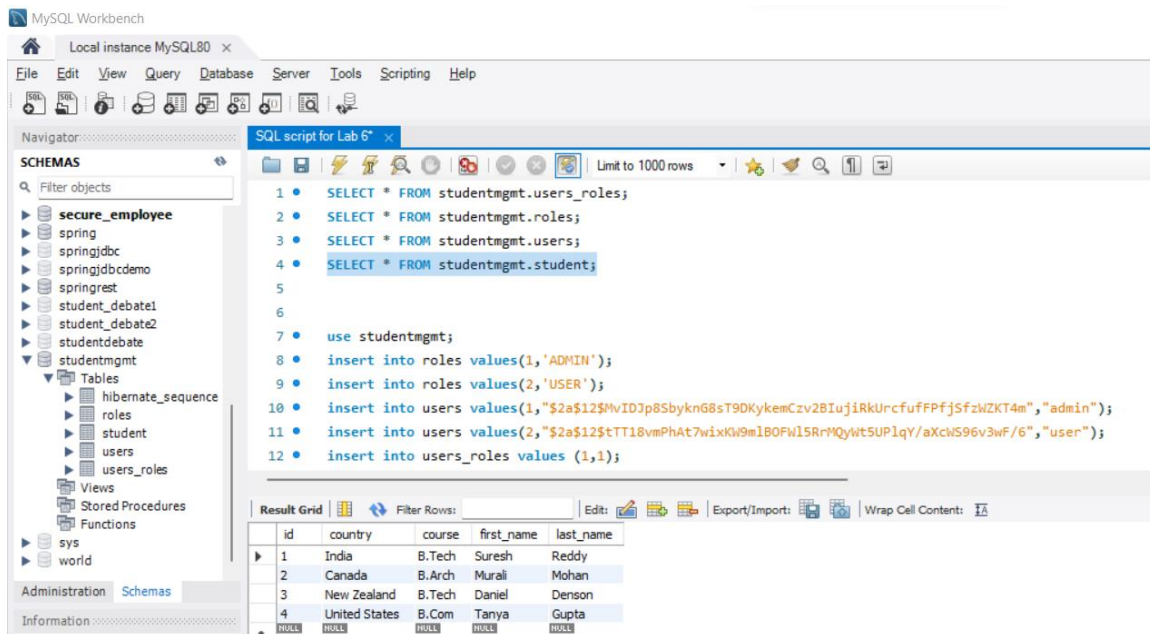
we see that the record was deleted from the UI:



[Add Student](#)[Logout](#)

Student Id	FirstName	LastName	Course	Country	Action
1	Suresh	Reddy	B.Tech	India	Update Delete
2	Murali	Mohan	B.Arch	Canada	Update Delete
3	Daniel	Denson	B.Tech	New Zealand	Update Delete
4	Tanya	Gupta	B.Com	United States	Update Delete

We can verify the same in db:



CRUD OPERATIONS TESTING USING USER role ACCESS:

Click on logout and login using credentials : user/user6as5

Please sign in

user

Sign in

We get the list of all students in the DB. All records are fetched and displayed on UI.

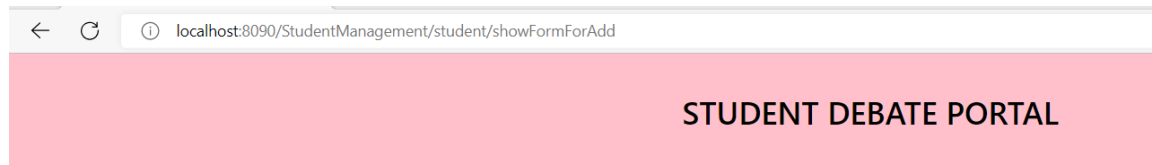
STUDENT DEBATE PORTAL

Add Student Logout

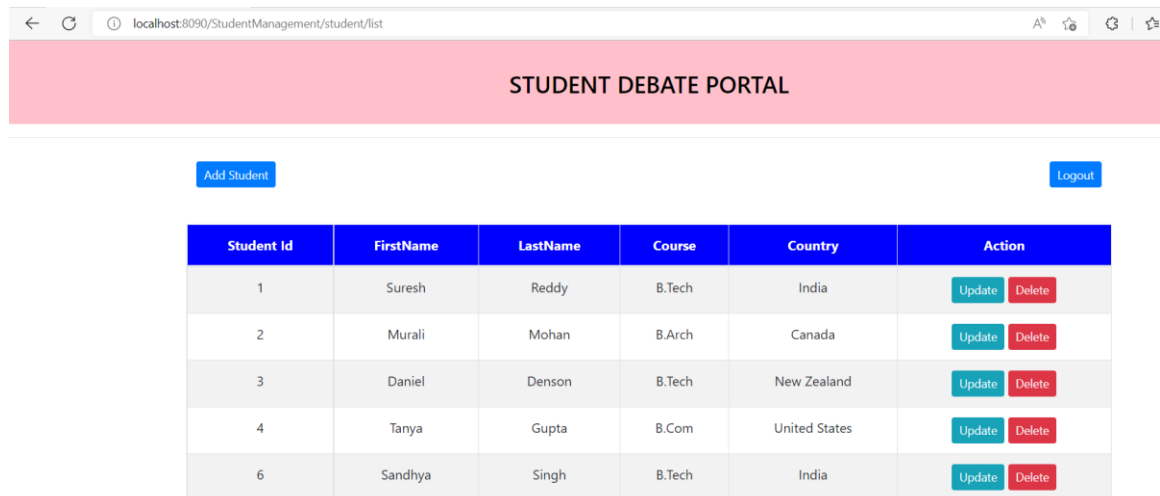
Student Id	FirstName	LastName	Course	Country	Action
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3	Daniel	Denson	B.Tech	New Zealand	Update Delete
4	Tanya	Gupta	B.Com	United States	Update Delete

. ADDING A STUDENT:

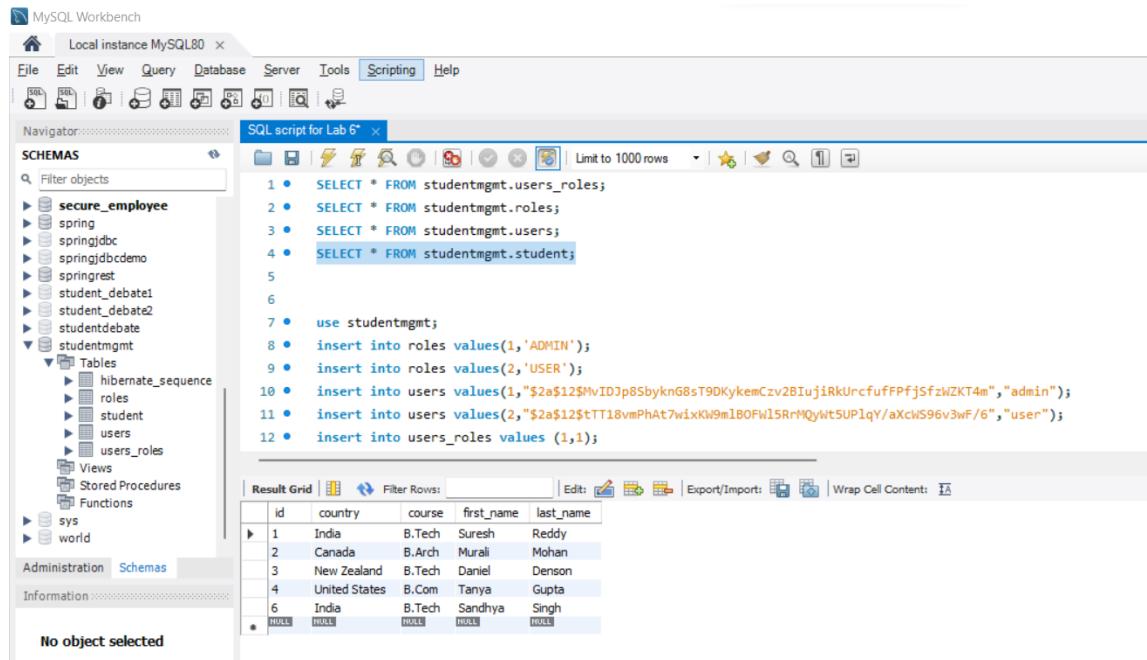
Click on Add Student button and enter the details. Click on Save button



We can see that the student has been added on the UI

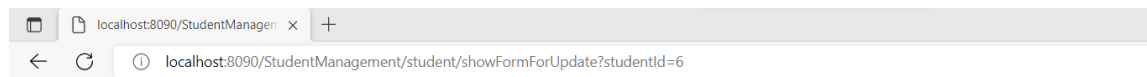


We can verify the same in the db:



UPDATE FUNCTIONALITY

Click on Update button and we get below:



HTTP Status 403 - Access is denied

Hello user, You dont have necessary permissions to access this page

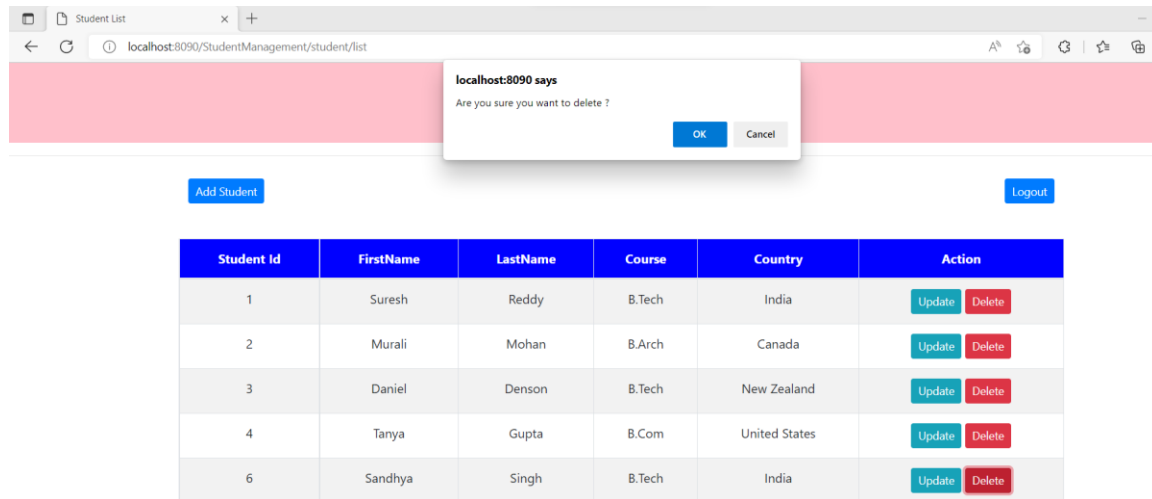
[Back to Students List](#)

Click on Back to Students List hyperlink

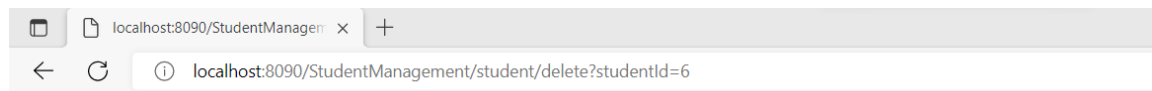
User does not have permissions to Update the student records.

DELETE FUNCTIONALITY

Click on Delete button and select Ok for Are you sure you want to delete?



We get below. User does not have access to Delete Student records.



HTTP Status 403 - Access is denied

Hello user, You dont have necessary permissions to access this page

[Back to Students List](#)

Click on Back to Students List to go back to list of all students

