WEEK 2 ASSIGNMENT

Modern Application Development (Java Spring Boot)

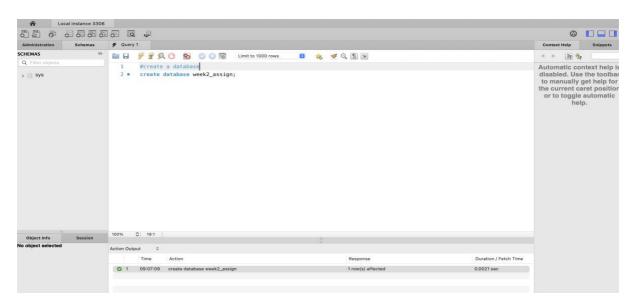
Name : Polagani Venkat Goud

Reg.No.:20BCE0084

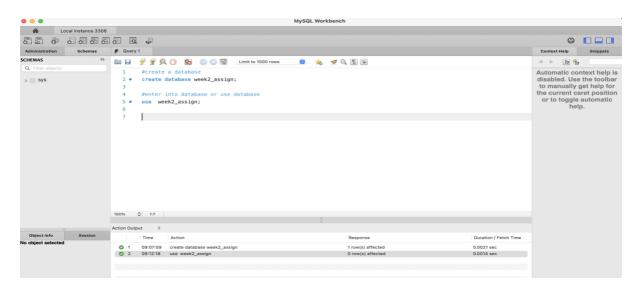
SQL:

CREATE UPDATE DELETE COMMANDS IN SQL

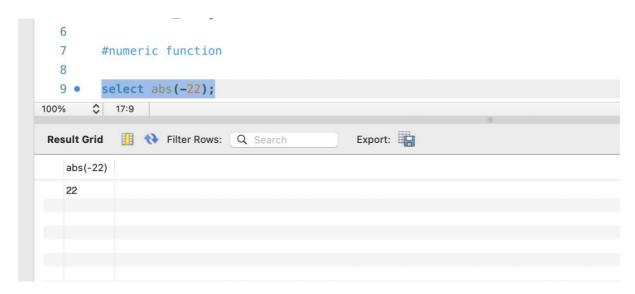
Create Database;



Use the database that is created



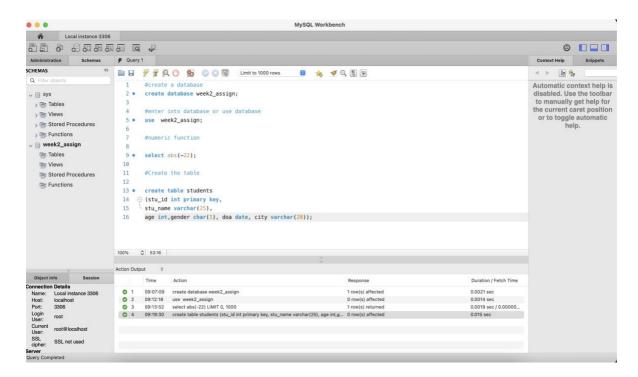
Example of numeric function



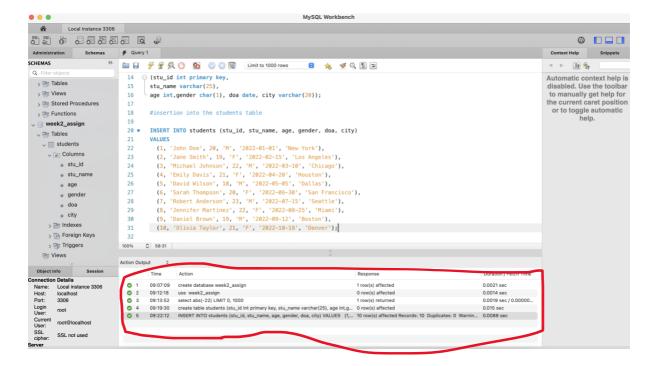
Find the created tables on the left side

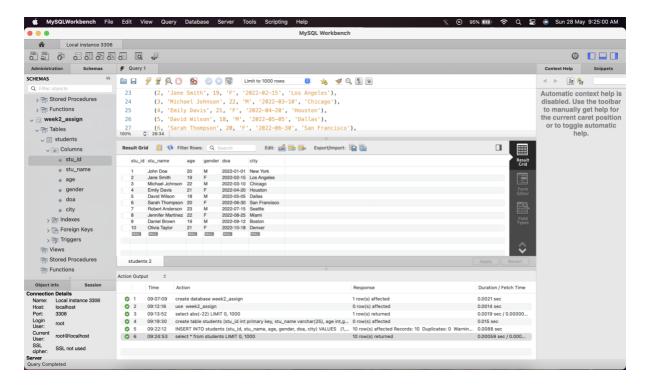
```
SCHEMAS
           * 🗀 🔒 🗲 🐔 👰 🕚 🗞 🕝 🐼 🖺 Limit to 1000 rows 🚦 埃 🝼 🔾 🕦 🖘
   sys
                           2 • create database week2_assign;
  > 🛅 Tables
                                #enter into database or use database
  > 🖶 Views
                           5 • use week2_assign;
  > 🛅 Stored Procedures
  > 🛅 Functions
                                #numeric function
                           9 • select abs(-22);
   Tiews
    Tored Procedures
                          11 #Create the table
                          12
    n Functions
                          13 • create table students
                          14 (stu_id int primary key,
15 stu_name varchar(25),
                          age int,gender char(1), doa date, city varchar(20));
                         Action Output 0
```

Table creation:

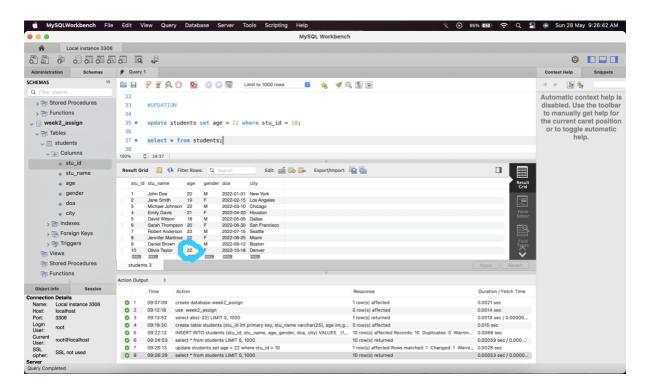


Insert Into student's table

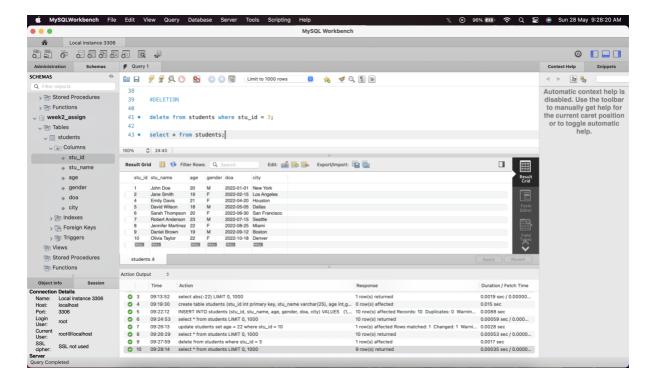




UPDATION



DELETION - Deleted the stu_id 3 records success



PERFORMED QUERIES:

```
#create a database
create database week2 assign;
#enter into database or use database
use week2 assign;
#numeric function
select abs(-22);
#Create the table
create table students
(stu id int primary key,
stu name varchar(25),
age int,gender char(1), doa date, city varchar(20));
#insertion into the students table
INSERT INTO students (stu_id, stu_name, age, gender, doa, city)
VALUES
  (1, 'John Doe', 20, 'M', '2022-01-01', 'New York'),
  (2, 'Jane Smith', 19, 'F', '2022-02-15', 'Los Angeles'),
  (3, 'Michael Johnson', 22, 'M', '2022-03-10', 'Chicago'),
  (4, 'Emily Davis', 21, 'F', '2022-04-20', 'Houston'), (5, 'David Wilson', 18, 'M', '2022-05-05', 'Dallas'), (6, 'Sarah Thompson', 20, 'F', '2022-06-30', 'San Francisco'),
```

```
(7, 'Robert Anderson', 23, 'M', '2022-07-15', 'Seattle'),
(8, 'Jennifer Martinez', 22, 'F', '2022-08-25', 'Miami'),
(9, 'Daniel Brown', 19, 'M', '2022-09-12', 'Boston'),
(10, 'Olivia Taylor', 21, 'F', '2022-10-18', 'Denver');

#UPDATION

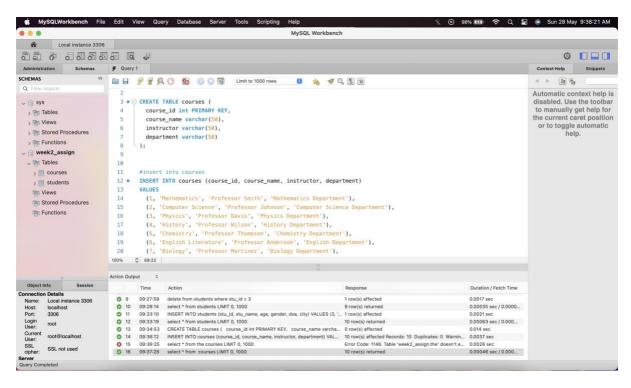
update students set age = 22 where stu_id = 10;
select * from students;

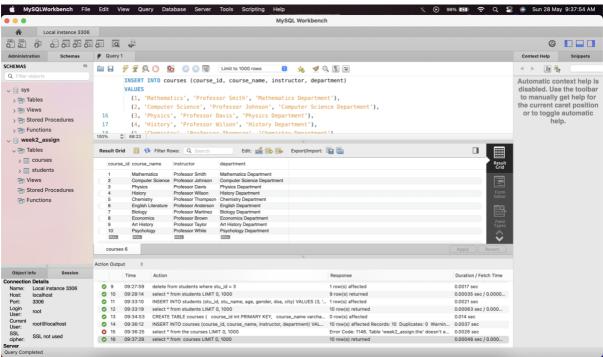
#DELETION

delete from students where stu_id = 3;
select * from students;
```

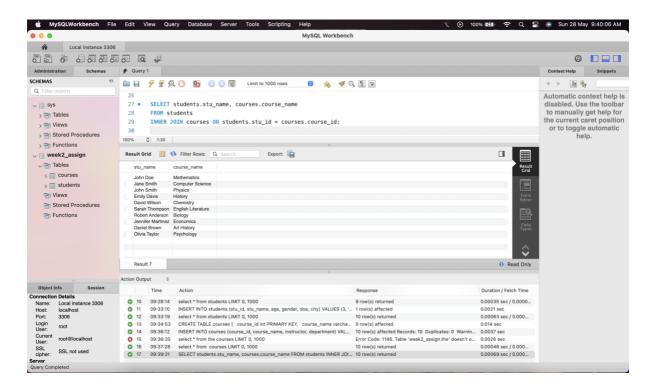
CREATE TABLES AND PERFORM JOINS

Creation and insertion of table and values

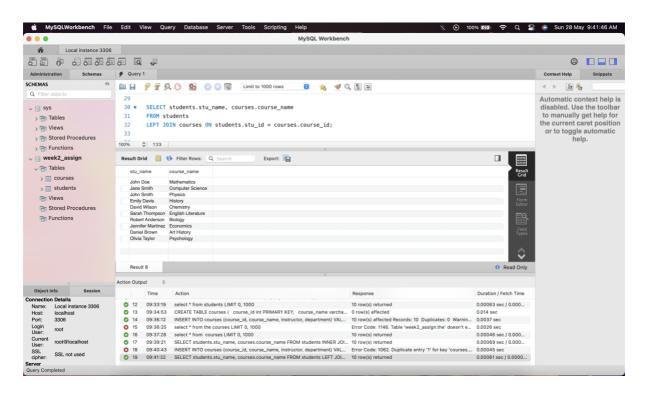




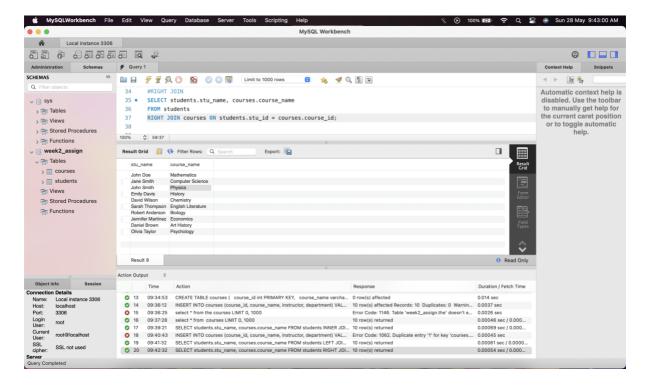
INNER JOIN



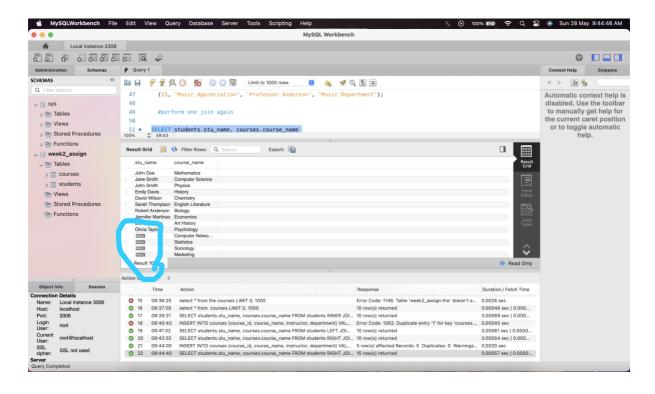
LEFT JOIN



RIGHT JOIN



There are 5 records that doesn't match id so the value returned is null in student id.



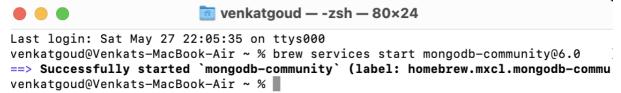
PERFORMED QUERIES:

```
#create another table
CREATE TABLE courses (
  course_id int PRIMARY KEY,
  course name varchar(50),
  instructor varchar(50),
 department varchar(50)
);
#insert into courses
INSERT INTO courses (course_id, course_name, instructor,
department)
VALUES
  (1, 'Mathematics', 'Professor Smith', 'Mathematics
Department'),
  (2, 'Computer Science', 'Professor Johnson', 'Computer
Science Department'),
  (3, 'Physics', 'Professor Davis', 'Physics Department'),
  (4, 'History', 'Professor Wilson', 'History
Department'),
  (5, 'Chemistry', 'Professor Thompson', 'Chemistry
Department');
#INNER JOIN
SELECT students.stu name, courses.course name
FROM students
INNER JOIN courses ON students.stu id = courses.course id;
#LEFT JOIN
SELECT students.stu_name, courses.course_name
FROM students
LEFT JOIN courses ON students.stu id = courses.course id;
#RIGHT JOIN
```

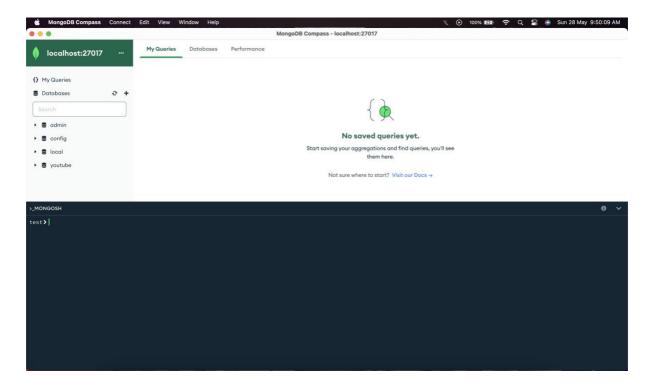
```
SELECT students.stu_name, courses.course_name
FROM students
RIGHT JOIN courses ON students.stu id = courses.course id;
#inserted more records
INSERT INTO courses (course_id, course_name, instructor,
department)
VALUES
  (11, 'Computer Networks', 'Professor Thompson',
'Computer Science Department'),
  (12, 'Statistics', 'Professor Wilson', 'Mathematics
Department'),
  (13, 'Sociology', 'Professor Davis', 'Social Sciences
Department'),
  (14, 'Marketing', 'Professor Johnson', 'Business
Department'),
  (15, 'Music Appreciation', 'Professor Anderson', 'Music
Department');
  #perform one join again
SELECT students.stu_name, courses.course_name
FROM students
RIGHT JOIN courses ON students.stu id = courses.course id;
```

CREATE UPDATE DELETE COMMANDS IN MONGODB

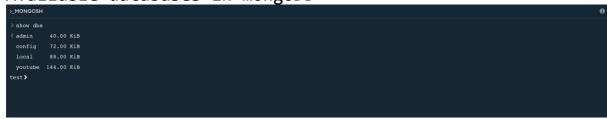
Start mongoDB



MongoDB compass

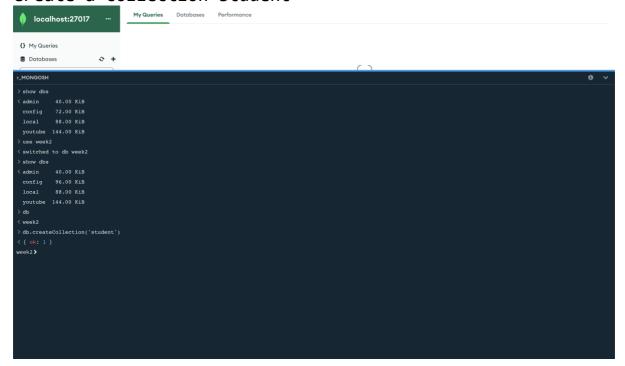


Available databases in mongoDB

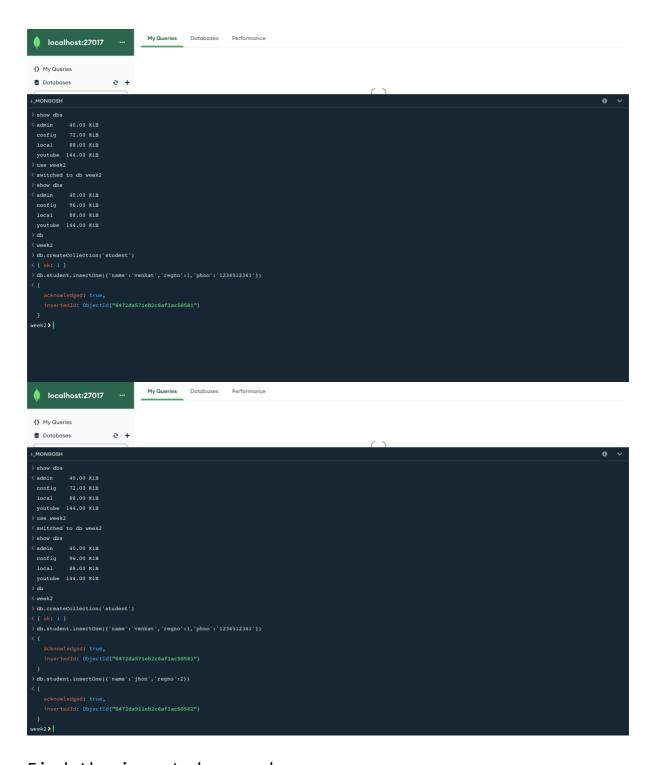


Create a new database week2

Create a collection student



INSERTION



Find the inserted records

```
db.student.find()

<{
    __id: ObjectId("6472da571eb2c6aflac50581"),
    name: 'venkat',
    regno: 1,
    phno: '1234512341'

}

{
    __id: ObjectId("6472da911eb2c6aflac50582"),
    name: 'jhon',
    regno: 2</pre>
```

UPDATION Updating the phone number of regno 3

```
db.student.updateOne(('regno':3),{$set:('phno':'8767984532')})

<(
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    unsertedId(nut: 0</pre>
```

DELETION

```
db.student.deleteOne({'name':'jhon'))

<{
    acknowledged: true,
    deletedCount: 1</pre>
```

John record got deleted

```
> db.student.find()

< {
    _id: ObjectId("6472da571eb2c6af1ac50581"),
    name: 'venkat',
    regno: 1,
    phno: '1234512341'
}

{
    _id: ObjectId("6472db8c1eb2c6af1ac50583"),
    name: 'Rahul',
    regno: 3,
    phno: '8767984532'
}</pre>
```

Refresh the compass databases on the left pane you can find the database and records

