

Modern Application Development (Java Spring Boot)

Assignment - Week - 2

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20BCE1721

1) Create, Update, Delete commands in MYSQL

Create:

The screenshot shows a MySQL IDE interface. The main editor displays a SQL query to create a table named 'college' in the 'college' database. The query is as follows:

```
1 CREATE TABLE college.college (  
2     college_id INT PRIMARY KEY,  
3     college_name VARCHAR(50),  
4     location VARCHAR(50)  
5 );  
6
```

Below the editor, the 'Output' panel shows the execution results of the query. The results are as follows:

#	Time	Action	Message	Duration / Fetch
33	12:10:35	SELECT employee_id, employee.name, employee.age, employee.department, comp...	3 row(s) returned	0.000 sec / 0.000 sec
34	12:17:56	Apply changes to companies	Changes applied	
35	12:18:15	CREATE TABLE companies company (company_id INT PRIMARY KEY, com...	0 row(s) affected	0.015 sec
36	12:19:49	DROP DATABASE 'companies'	1 row(s) affected	0.031 sec
37	12:20:00	Apply changes to college	Changes applied	
38	12:20:15	CREATE TABLE college.college (college_id INT PRIMARY KEY, college_na...	0 row(s) affected	0.016 sec

Insert:

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- college
 - Tables
 - Views
 - Stored Procedures
 - Functions
- employees
 - Tables
 - Views
 - Stored Procedures
 - Functions
- sakila
 - Tables
 - Views
 - Stored Procedures
 - Functions
- sys
- world

Query 1

```

1 • UPDATE college
2   SET college_name = 'VIT', location = 'Chennai'
3   WHERE college_id = 2;

```

Result Grid

college_id	college_name	location
1	VIT	Vellore
2	VIT	Chennai
3	VIT	Bhopal

Information

No object selected

Output

#	Time	Action	Message	Duration / Fetch
44	12:28:31	INSERT INTO college (college_id, college_name, location) VALUES (1, 'VIT', 'V...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
45	12:28:57	USE college	0 row(s) affected	0.000 sec
46	12:28:57	Select * from college LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
47	12:30:06	UPDATE college SET college_name = 'VIT', location = 'Chennai' WHERE college_...	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.015 sec
48	12:31:17	USE college	0 row(s) affected	0.000 sec
49	12:31:17	Select * from college LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context Help Snippets

Query 1

```

1 • USE college;
2 • Select * from college;

```

Result Grid

college_id	college_name	location
1	VIT	Vellore
2	VIT	Chennai
3	VIT	Bhopal
NULL	NULL	NULL

Delete:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

college

Tables

college

Columns

college_id

college_name

location

Indexes

Foreign Keys

Triggers

student

students

Views

Administration Schemas

Information

Schema: college

Query 1 x

Limit to 1000 rows

1 • DELETE FROM college WHERE college_id = 1;

2

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

college_id	college_name	location
2	VIT	Chennai
3	VIT	Bhopal
NULL	NULL	NULL

college 2 x

Apply Revert

Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
16	16:52:34	DELETE FROM college WHERE collegeid = 1	Error Code: 1146. Table 'employees.college' does...	0.000 sec
17	16:52:36	DELETE FROM college WHERE collegeid = 1	Error Code: 1146. Table 'employees.college' does...	0.000 sec
18	16:52:41	DELETE FROM college WHERE collegeid = 1	Error Code: 1054. Unknown column 'collegeid' in '...	0.016 sec
19	16:52:51	DELETE FROM college WHERE college_id = 1	1 row(s) affected	0.016 sec
20	16:53:13	USE college	0 row(s) affected	0.016 sec
21	16:53:13	select * from college LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

college

Tables

college

Columns

college_id

college_name

location

Indexes

Foreign Keys

Triggers

student

students

Views

Administration Schemas

Information

Schema: college

Query 1 x

Limit to 1000 rows

1 • USE college;

2 • select * from college;

3

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

college_id	college_name	location
2	VIT	Chennai
3	VIT	Bhopal
NULL	NULL	NULL

college 2 x

Apply Revert

Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
16	16:52:34	DELETE FROM college WHERE collegeid = 1	Error Code: 1146. Table 'employees.college' does...	0.000 sec
17	16:52:36	DELETE FROM college WHERE collegeid = 1	Error Code: 1146. Table 'employees.college' does...	0.000 sec
18	16:52:41	DELETE FROM college WHERE collegeid = 1	Error Code: 1054. Unknown column 'collegeid' in '...	0.016 sec
19	16:52:51	DELETE FROM college WHERE college_id = 1	1 row(s) affected	0.016 sec
20	16:53:13	USE college	0 row(s) affected	0.016 sec
21	16:53:13	select * from college LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

2) Create tables and perform joins in MYSQL

The screenshot displays the MySQL Workbench interface. The top pane shows a SQL query for creating a table named 'college.students' with columns 'college_id' (INT PRIMARY KEY) and 'student_name' (VARCHAR(50)). The bottom pane shows the execution output, including a table of actions and messages.

Query 1

```
1 CREATE TABLE college.students (  
2     college_id INT PRIMARY KEY,  
3     student_name VARCHAR(50)  
4 );
```

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output

Action Output

#	Time	Action	Message	Duration / Fetch
49	12:31:17	Select * from college LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
50	12:34:06	CREATE TABLE student (college_id INT PRIMARY KEY, student_name VAR...	0 row(s) affected	0.015 sec
51	12:35:38	INSERT INTO student (college_id, student_name) VALUES (1, 'Will'), (2, 'Ash...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
52	12:37:27	USE student	Error Code: 1049. Unknown database 'student'	0.000 sec
53	12:37:51	CREATE TABLE college.student (college_id INT PRIMARY KEY, student_na...	Error Code: 1050. Table 'student' already exists	0.000 sec
54	12:38:24	CREATE TABLE college.students (college_id INT PRIMARY KEY, student_n...	0 row(s) affected	0.032 sec

Query 1

```
1 INSERT INTO students (college_id, student_name)  
2 VALUES  
3     (1, 'John'),  
4     (2, 'Ashwin'),  
5     (3, 'Will');
```

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output

Action Output

#	Time	Action	Message	Duration / Fetch
50	12:34:06	CREATE TABLE student (college_id INT PRIMARY KEY, student_name VAR...	0 row(s) affected	0.015 sec
51	12:35:38	INSERT INTO student (college_id, student_name) VALUES (1, 'Will'), (2, 'Ash...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.000 sec
52	12:37:27	USE student	Error Code: 1049. Unknown database 'student'	0.000 sec
53	12:37:51	CREATE TABLE college.student (college_id INT PRIMARY KEY, student_na...	Error Code: 1050. Table 'student' already exists	0.000 sec
54	12:38:24	CREATE TABLE college.students (college_id INT PRIMARY KEY, student_n...	0 row(s) affected	0.032 sec
55	12:40:33	INSERT INTO students (college_id, student_name) VALUES (1, 'John'), (2, 'As...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec

Query 1 x

```

1 • USE college;
2 • Select * from students;

```

Limit to 1000 rows

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

college_id	student_name
1	John
2	Ashwin
3	Will

students 12 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
53	12:37:51	CREATE TABLE college student (college_id INT PRIMARY KEY, student_na...	Error Code: 1050. Table 'student' already exists	0.000 sec
54	12:38:24	CREATE TABLE college students (college_id INT PRIMARY KEY, student_n...	0 row(s) affected	0.032 sec
55	12:40:33	INSERT INTO students (college_id, student_name) VALUES (1, 'John'), (2, 'As...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
56	12:41:19	USE students	Error Code: 1049. Unknown database 'students'	0.000 sec
57	12:41:50	USE college	0 row(s) affected	0.000 sec
58	12:41:50	Select * from students LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Join:

Query 1 x

```

1 • SELECT student.student_name, college.college_name, college.location
2 FROM student
3 JOIN college ON student.college_id = college.college_id;

```

Limit to 1000 rows

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

student_name	college_name	location
Will	VIT	Vellore
Ashwin	VIT	Chennai
John	VIT	Bhopal

Result 13 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
54	12:38:24	CREATE TABLE college students (college_id INT PRIMARY KEY, student_n...	0 row(s) affected	0.032 sec
55	12:40:33	INSERT INTO students (college_id, student_name) VALUES (1, 'John'), (2, 'As...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0.016 sec
56	12:41:19	USE students	Error Code: 1049. Unknown database 'students'	0.000 sec
57	12:41:50	USE college	0 row(s) affected	0.000 sec
58	12:41:50	Select * from students LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
59	12:43:23	SELECT student.student_name, college.college_name, college.location FROM stu...	3 row(s) returned	0.000 sec / 0.000 sec

3) Create, Update, Delete commands in Mongo
 Insert:

MongoDB Compass - localhost27017/employees.employee

Connect Edit View Collection Help

localhost:27017

Documents employees.emplo...

My Queries

Databases

Search

admin

config

employees

employee

local

startup_log

employees.employee

0 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Explain Plan Indexes Validation

Filter Type a query: { field: 'value' } Reset Find More Options

ADD DATA EXPORT DATA

1 - 2 of 2

`{ "_id": ObjectId("64732ea8a4fbc24870eca39b"), "name": "santy", "age": 21, "dept": "CSE" }`

`{ "_id": ObjectId("64732f1da4fbc24870eca39c"), "name": "santy", "age": 21, "dept": "CSE" }`

```
>_MONGOSH
{
  switched to db employees
}
> db.employee.insertOne({name:"santy",age:21,dept:"CSE"});
{
  acknowledged: true,
  insertedId: ObjectId("64732ea8a4fbc24870eca39b")
}
> db.employee.insertOne({name:"santy",age:21,dept:"CSE"});
{
  acknowledged: true,
  insertedId: ObjectId("64732f1da4fbc24870eca39c")
}
}
```

Databases

Search

admin

config

employees

employee

local

startup_log

Documents Aggregations Schema Explain Plan Indexes Validation

Filter Type a query: { field: 'value' } Reset Find More Options

ADD DATA EXPORT DATA

1 - 3 of 3

`{ "_id": ObjectId("64732ea8a4fbc24870eca39b"), "name": "santy", "age": 21, "dept": "CSE" }`

`{ "_id": ObjectId("64732f1da4fbc24870eca39c"), "name": "santy", "age": 21, "dept": "CSE" }`

`{ "_id": ObjectId("6473363ca4fbc24870eca39d"), "name": "danny", "age": 20, "dept": "AI" }`

```
>_MONGOSH
{
}
> db.employee.insertOne({name:"danny",age:20,dept:"AI"});
{
  acknowledged: true,
  insertedId: ObjectId("6473363ca4fbc24870eca39d")
}
}
```

Update:

My Queries

Databases

Search

admin

config

employees

employee

local

startup_log

employees.employee

01DOCUMENTSINDEXES

DocumentsAggregationsSchemaExplain PlanIndexesValidation

FilterType a query: { field: 'value' }ResetFindMore Options

ADD DATAEXPORT DATA1 - 3 of 3

_id: ObjectId('64732ea8a4fbc24870eca39b')

name: "leo"

age: 21

dept: "CSE"

_id: ObjectId('64732fida4fbc24870eca39c')

name: "santy"

age: 21

dept: "CSE"

_id: ObjectId('6473363ca4fbc24870eca39d')

name: "danny"

age: 20

dept: "AI"

>_MONGOOSH

> db.employee.updateOne({ name: "santy" }, { \$set: { name: "leo" } })

< {

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

Delete:

My Queries

Databases

Search

admin

config

employees

employee

local

startup_log

employees.employee

01DOCUMENTSINDEXES

DocumentsAggregationsSchemaExplain PlanIndexesValidation

FilterType a query: { field: 'value' }ResetFindMore Options

ADD DATAEXPORT DATA1 - 2 of 2

_id: ObjectId('64732ea8a4fbc24870eca39b')

name: "leo"

age: 21

dept: "CSE"

_id: ObjectId('6473363ca4fbc24870eca39d')

name: "danny"

age: 20

dept: "AI"

>_MONGOOSH

> db.employee.deleteOne({ name: "santy" })

< {

acknowledged: true,

deletedCount: 1

}

employees➤