

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

entry_d41

- Tables
 - country
 - customers
 - dance_students
 - employees
 - managers
 - music_students
 - orders
 - parent_name
 - participants

Administration Schemas

Information

No object selected

Object Info Session

actions user defined functions joins sub queries views stored procedures sp triggers DCL ASSIGNMENT 10 x

Don't Limit

```
1 #1. Create a table named teachers with fields id, name, subject, experience and salary and insert 8 rows.
2 create table teachers(teacher_id int primary key ,Name_of_the_teacher varchar(30) not null, subject varchar(30) not null,
3 experience int not null,salary int not null);
4 desc teachers;
5 insert into teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) values (1,"ajay","English",2,45000),
6 (2,"arun","Maths",11,65000),(3,"fathima","Physics",3,40000),(4,"Farook","Chemistry",5,50000),(5,"Devanad","Social science",6,55000),
7 (6,"Janaki","Biology",7,55000),(7,"Neethu","IT",2,35000),(8,"Martin","Computer science",5,45000);
8 select * from teachers;
9
```

Result Grid

	teacher_id	Name_of_the_teacher	subject	experience	salary
1	ajay	English	2	45000	
2	arun	Maths	11	65000	
3	fathima	Physics	3	40000	
4	Farook	Chemistry	5	50000	
5	Devanad	Social science	6	55000	
6	Janaki	Biology	7	55000	
7	Neethu	IT	2	35000	
8	Martin	Computer science	5	45000	
*	NULL	NULL	NULL	NULL	NULL

teachers 2 x

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
3	19:47:07	insert into teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) values (1,"...	8 row(s) affected Records: 8 Duplicates: 0 Warnings: 0	0.031 sec
4	19:47:10	select * from teachers	8 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Schemas

Filter objects

entry_d41

Tables

- country
- customers
- dance_students
- employees
- managers
- music_students
- orders
- parent_name
- participants

Administration Schemas

Information

No object selected

Object Info Session

actions user defined functions joins sub queries views stored procedures sp triggers DCL ASSIGNMENT 10*

Don't Limit

```
13 DELIMITER $$
14 CREATE TRIGGER before_insert_teacher
15 BEFORE INSERT ON teachers FOR EACH ROW
16 BEGIN
17     if new.salary < 0
18     then
19         SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT='salary cannot be negative';
20     end if;
21 END $$
22 DELIMITER ;
23 INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALUES (9,"Ram","Maths",2,-15000);
24 show triggers from entry_d41;
25
26 #3. Create an after insert trigger named after_insert_teacher that inserts a row with teacher_id,action
27 -- timestamp to a table called teacher_log when a new entry gets inserted to the teacher table. teacher_id
28 -- -> column of teacher table, action -> the trigger action, timestamp -> time at which the new row has got inserted.
29
30 CREATE TABLE teacher_log (teacher_id INT primary key NOT NULL,action VARCHAR(50) NOT NULL,timestamp DATETIME NOT NULL);
31 select * from teacher_log;
32
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
7	19:48:38	INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALU...	Error Code: 1644. salary cannot be negative	0.000 sec
8	19:48:55	INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALU...	Error Code: 1644. salary cannot be negative	0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

actions

user defined functions

joins

sub queries

views

stored procedures

sp

triggers

DCL

ASSIGNMENT 10*

entry_d41

Tables

country

customers

dance_students

employees

managers

music_students

orders

parent_name

participants

No object selected

17

18

19

20

21

22

23

24

25

If new.salary<0

then

SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT='salary cannot be negative';

end if;

END \$\$

DELIMITER ;

INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALUES (9,"Ram","Maths",2,-15000);

show triggers from entry_d41;

Result Grid

Filter Rows:

Exports

Wrap Cell Content

Trigger	Event	Table	Statement	Timing	Created	sql_mode	Definer	Character Set
before_insert_teacher	INSERT	teachers	BEGIN if new.salary<0 then SIGNAL SQLSTATE ...	BEFORE	2024-11-16 19:47:47.21	ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLE...	root@localhost	utf8mb4

Result 3

Output

Action Output

#	Time	Action	Message	Duration / Fetch
8	19:48:55	INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALU...	Error Code: 1644. salary cannot be negative	0.000 sec
9	19:49:05	show triggers from entry_d41	1 row(s) returned	0.032 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

entry_d41

- Tables
 - country
 - customers
 - dance_students
 - employees
 - managers
 - music_students
 - orders
 - parent_name
 - participants

Administration Schemas

Information

No object selected

Result Grid

teacher_id	action	timestamp
NULL	NULL	NULL

teacher_log 4 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 10	19:49:26	CREATE TABLE teacher_log (teacher_id INT primary key NOT NULL, action VARCHAR(50) NOT NULL, timestamp DATETIME NOT NULL);	0 row(s) affected	0.031 sec
✓ 11	19:49:29	select * from teacher_log;	0 row(s) returned	0.016 sec / 0.000 sec

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator actions user defined functions joins sub queries views stored procedures sp triggers DCL ASSIGNMENT 10 x

SCHEMAS

Filter objects

entry_d41

Tables

- country
- customers
- dance_students
- employees
- managers
- music_students
- orders
- parent_name
- participants

Administration Schemas

Information

No object selected

```
35 AFTER INSERT ON teachers FOR EACH ROW
36 BEGIN
37 insert into teacher_log (teacher_id,action,timestamp) values (new.teacher_id,"insert data",now());
38 END $$
39 DELIMITER ;
40
41 INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALUES (10,"vipin","maths",3,35000);
42 select * from teachers;
43
```

Result Grid

	teacher_id	Name_of_the_teacher	subject	experience	salary
1	ajay	English	2	45000	
2	arun	Maths	11	65000	
3	fathima	Physics	3	40000	
4	Farook	Chemstry	5	50000	
5	Devanad	Sodal science	6	55000	
6	Jahadi	biology	7	53000	
7	Neethu	IT	2	35000	
8	Martin	Computer science	5	45000	
10	vipin	maths	3	35000	
*	NULL	NULL	NULL	NULL	NULL

teachers 5 x

Output

#	Time	Action	Message	Duration / Fetch
✓ 13	19:50:04	INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALU...	1 row(s) affected	0.016 sec
✓ 14	19:50:55	select * from teachers	9 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Schemas

entry_d41

Tables

country

customers

dance_students

employees

managers

music_students

orders

parent_name

participants

Administration Schemas

No object selected

actions user defined functions joins sub queries views stored procedures sp triggers DCL ASSIGNMENT 10*

Dont Limit

36 BEGIN

37 insert into teacher_log (teacher_id,action,timestamp) values (new.teacher_id,"insert data",now());

38 END \$\$

39 DELIMITER ;

40

41 INSERT INTO teachers(teacher_id,Name_of_the_teacher,subject,experience,salary) VALUES (10,"vipin","maths",3,35000);

42 select * from teachers;

43 select * from teacher_log;

44

Result Grid

Filter Rows:

Edit

Export/Import

Wrap Cell Content:

teacher_id	action	timestamp
10	insert data	2024-11-16 19:50:04
*	NULL	NULL

teacher_log 6 x

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 14	13:50:55	select * from teachers	9 row(s) returned	0.000 sec / 0.000 sec
✓ 15	13:51:23	select * from teacher_log	1 row(s) returned	0.000 sec / 0.000 sec

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- players
- products
- selected_students
- staff_new
- staffs
- student_name
- students
- teachers
 - Columns
 - teacher_id

Administration Schemas

Information

Column: **teacher_id**

Definition: **teacher_id** int PK

actions user defined functions joins sub queries views stored procedures sp triggers DCL ASSIGNMENT 10*

Don't Limit

```
45 #4. Create a before delete trigger that will raise an error when you try to delete a row that has experience greater than 10 years.
46
47 DELIMITER $$
48 • CREATE TRIGGER before_teacher_delete
49 before delete on teachers for each row
50 begin
51 if old.experience>10
52 then
53 SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT='cannot delete teacher with more than 10 years of experience';
54 end if;
55 END $$
56 DELIMITER ;
57
58 • delete from teachers where teacher_id=2;
59 • select * from teachers ;
60
61 #5. Create an after delete trigger that will insert a row to teacher_log table when that row is deleted from teacher table.
62
63 DELIMITER $$
64 • CREATE TRIGGER after_delete_teacher AFTER DELETE ON teachers FOR EACH ROW
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
18	19:52:31	delete from teachers where teacher_id=2	Error Code: 1644. cannot delete teacher with more than 10 years of experience	0.000 sec
19	19:52:34	delete from teachers where teacher_id=2	Error Code: 1644. cannot delete teacher with more than 10 years of experience	0.015 sec

Object Info Session

mysql workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHMAS

Filter objects

- players
- products
- selected_students
- staff_new
- staffs
- student_name
- students
- teachers
 - Columns
 - teacher_id

Administration Schemas

Information

Column: **teacher_id**

Definition: **teacher_id** int PK

actions user defined functions joins sub queries views stored procedures sp triggers DCL ASSIGNMENT 107 x

Don't Limit

```
64 CREATE TRIGGER after_delete_teacher AFTER DELETE ON teachers FOR EACH ROW
65 BEGIN
66 INSERT INTO teacher_log(teacher_id,action,timestamp) VALUES (OLD.teacher_id, 'AFTER DELETE',now());
67 END $$
68 DELIMITER ;
69
70 delete from teachers where teacher_id=7;
71 select * from teacher_log;
72
```

Result Grid

teacher_id	action	timestamp
7	AFTER DELETE	2024-11-16 19:53:26
10	insert data	2024-11-16 19:50:04
NULL	NULL	NULL

teacher_log 7 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓	22 19:53:26	delete from teachers where teacher_id=7	1 row(s) affected	0.031 sec
✓	23 19:53:33	select * from teacher_log	2 row(s) returned	0.000 sec / 0.000 sec

Object Info Session