

MYSQL QUERIES

Objective:

Install Mysql workbench on windows 10

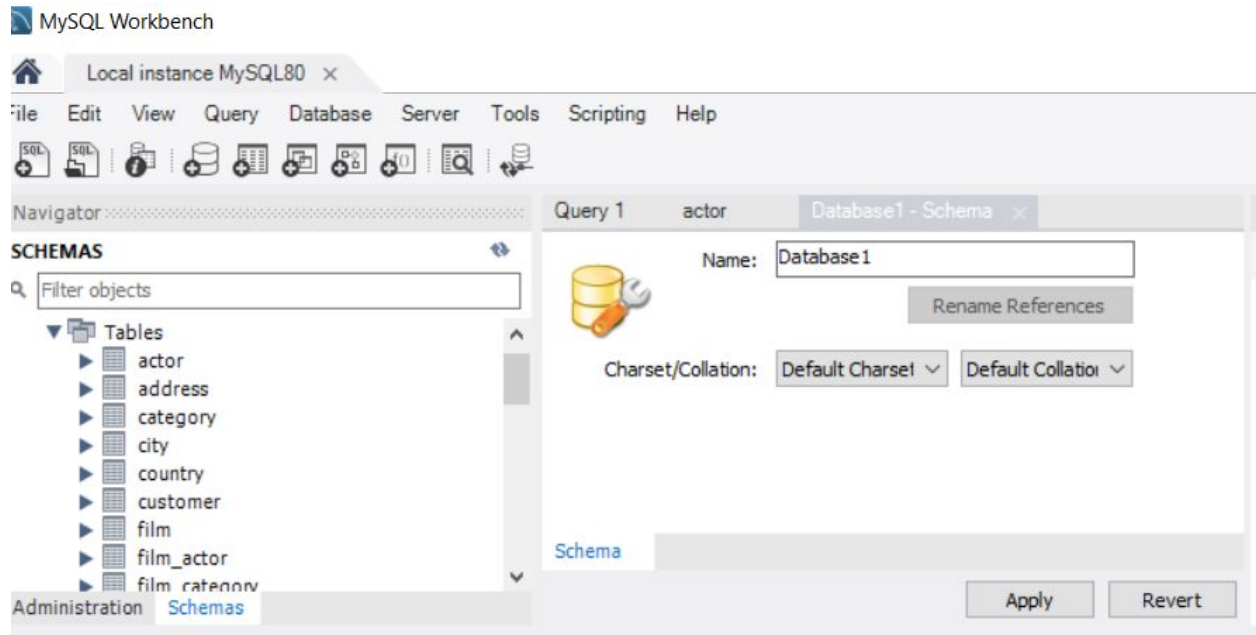
Create Database and run queries on Mysql workbench.

Step 1:

Download and install Mysql workbench 8.0 from [mysql.com](https://dev.mysql.com/downloads/workbench/)

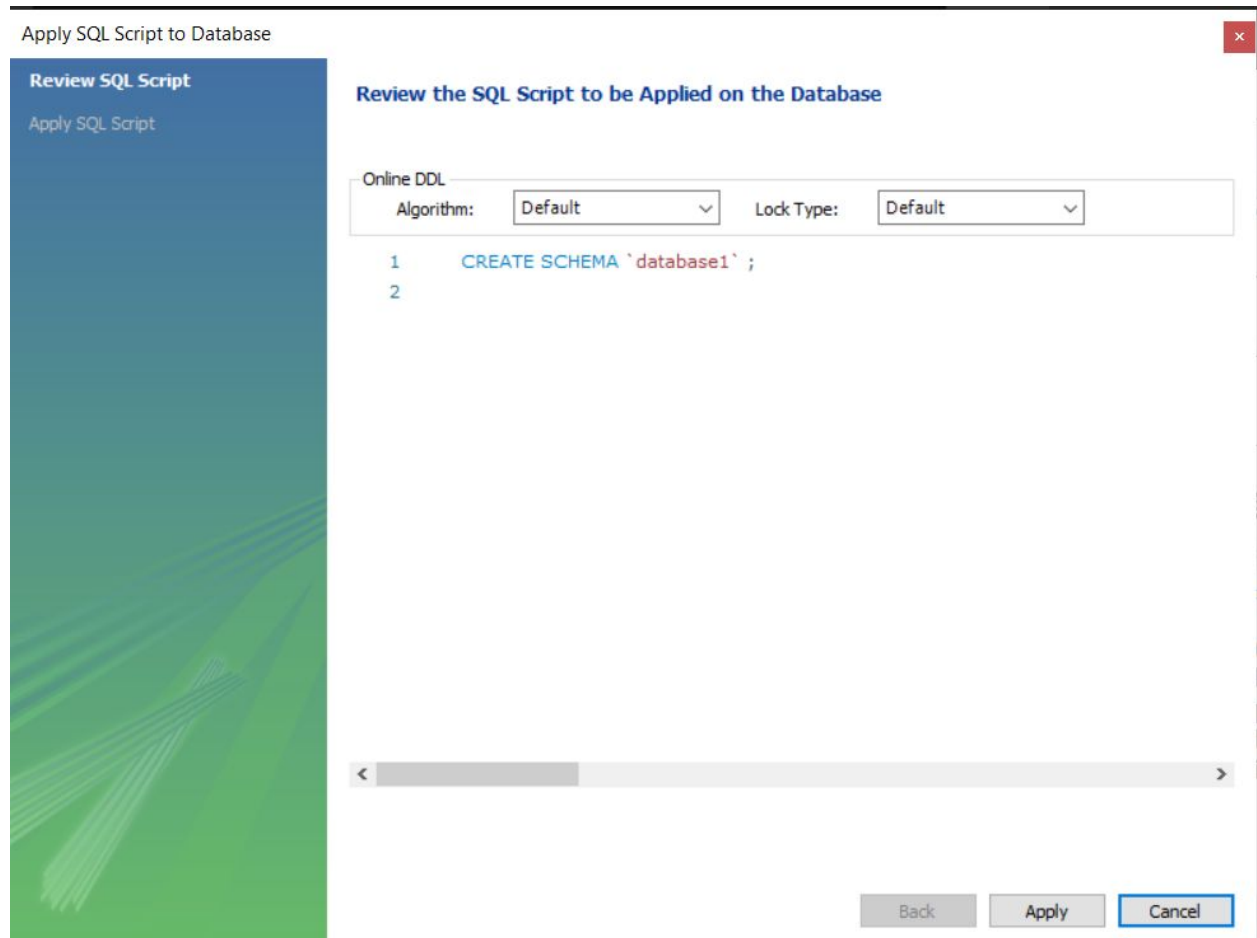
Step 2:

From start open Mysql workbench after installation is complete and create a new database 'database1' and click on apply



Step 3:

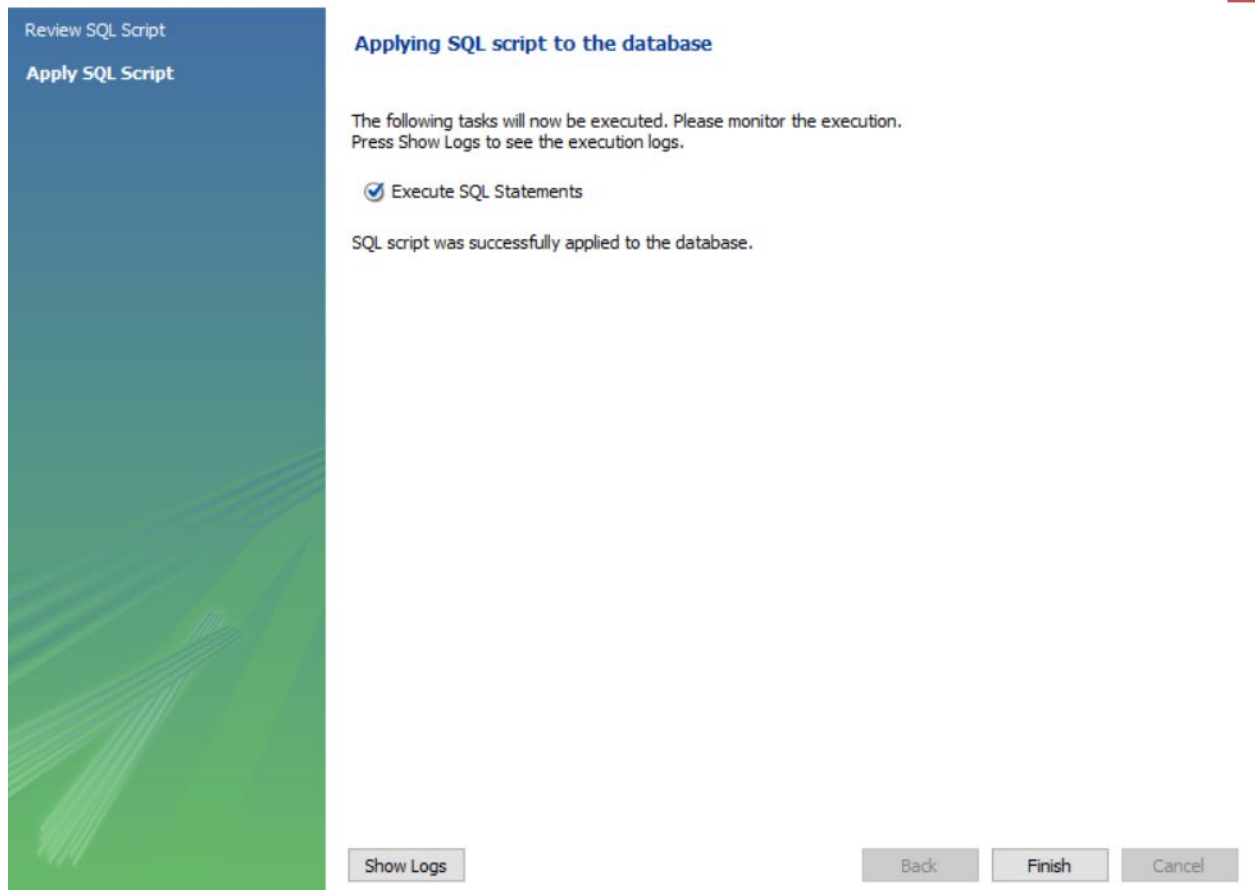
A new window appears select 'Apply'




Step 3:

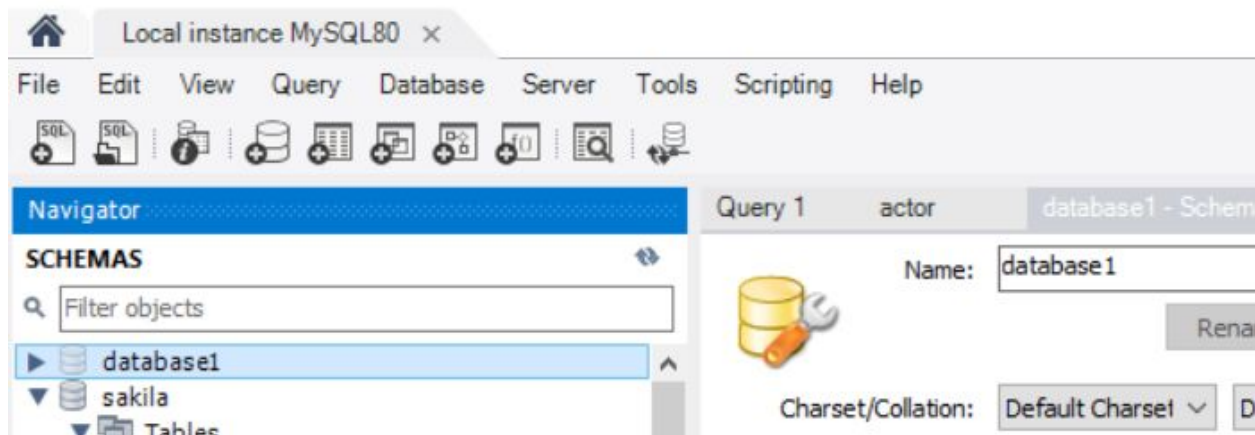
Select 'Finish'

Apply SQL Script to Database



Step 4:
Create database1.

 MySQL Workbench



Step 5: add employee table and columns: employee id, first name, last name and Age.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Query 1 actor city database3 - Schema **employee table - Table**

Table Name: Schema: **database1**

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
employee id	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
first name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
last name	VARCHAR(45)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Age	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name: Data Type:

Charset/Collation:

Default:

Comments:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☒ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply Revert

Review SQL Script

Apply SQL Script

Review the SQL Script to be Applied on the Database

Online DDL

Algorithm:

Default

Lock Type:

Default

```
1 CREATE TABLE `database1`.`employee table` (  
2   `employee id` INT NOT NULL,  
3   `first name` VARCHAR(45) NOT NULL,  
4   `last name` VARCHAR(45) NULL,  
5   `Age` INT NOT NULL);  
6
```

<

>

Back

Apply

Cancel

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

database1

Tables

employee table

Views

Stored Procedures

Functions

database3

Tables

Views

Stored Procedures

Functions

sakila

Tables

Views

Stored Procedures

Functions

store

sys

world

Administration Schemas

Schema: database1

Query 1 actor city database3 - Schema employee table - Table x

Table Name: employee table Schema: database1

Charset/Collation: utf8mb4 utf8mb4_0900_ai Engine: InnoDB

Comments:

Column Name: Age Data Type: INT(11)

Charset/Collation: Default Charset Default Collation Default:

Comments:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☒ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
2	17:50:56	Apply changes to database3	Changes applied	
3	17:51:28	Apply changes to database3	No changes detected	
4	17:53:40	Apply changes to employee table	Error 1064: You have an error in your SQL syntax; ...	
5	17:57:29	Apply changes to employee table	Changes applied	

Step 7: Add data to the columns.

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: database1 employeeetable actor database1.employeeetable employeeetable - Table employeeetable - Table employeeetable employeeetable x

Limit to 1000 rows

```
1 • SELECT * FROM database1.employeeetable;  
2 |
```

Result Grid

employee id	first name	last name	Age
101	malligai	malli	22
102	bri	man	23
103	mun	bun	25
104	gandhi	gandhi	25
105	mahatma	mahatma	26
106	indira	gandhi	27
107	jawaharlal	nehru	28
108	lakshmi	lakshmi	29
109	pillayar	ganesha	30
110	sivoham	sivoham	22
111	buddhi	buddhi	23
112	siddhi	siddhi	24
113	mahaveer	mahaveer	25
114	hanuman	hanuman	26
115	chalisa	chalisa	27
116	sai	sai	28
117	baba	baba	29
118	auro	auro	30
119	mira	mira	31
120	saraswathi	saraswathi	32
121	vishnu	vishnu	28

employeeetable 5 x

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
54	20:36:48	SELECT * FROM database1.employeeetable LIMIT 0, 1000	24 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Table: employeeetable

Columns:

- employee id int(11) AI PK
- first name varchar(45)
- last name varchar(45)
- Age int(11)

Step 8 : start querying database - ORDER BY query

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'database1' expanded, showing 'employeeetable' and 'actor' tables. The 'employeeetable' table structure is shown with columns: employeeid, first name, last name, and Age. The main query editor contains the following SQL query:

```
1 • SELECT * FROM database1.employeeetable ORDER BY Age;
2
```

The 'Result Grid' displays the query results, sorted by Age. The data is as follows:

employee id	first name	last name	Age
101	malligai	mali	22
110	sivoham	sivoham	22
102	bri	man	23
111	buddhi	buddhi	23
112	siddhi	siddhi	24
103	mun	bun	25
104	gandhi	gandhi	25
113	mahaveer	mahaveer	25
105	mahatma	mahatma	26
114	hanuman	hanuman	26
106	indira	gandhi	27
115	chalisa	chalisa	27
107	jawaharlal	nehru	28
116	sai	sai	28
121	vishnu	vishnu	28
108	lakshmi	lakshmi	29
117	baba	baba	29
122	brahma	brahma	29

The bottom panel shows the 'Output' tab with the following log entries:

#	Time	Action	Message	Duration / Fetch
54	20:36:48	SELECT * FROM database1.employeeetable LIMIT 0, 1000	24 row(s) returned	0.000 sec / 0.000 sec
55	20:39:03	SELECT * FROM database1.employeeetable LIMIT 0, 1000	24 row(s) returned	0.000 sec / 0.000 sec
56	20:43:56	SELECT * FROM database1.employeeetable ORDER BY Age LIMIT ...	24 row(s) returned	0.000 sec / 0.000 sec

Step 9 : start querying database - OR query

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: database1.employeeetable actor database1.employeeetable employeeetable - Table employeeetable - Table employeeetable

SCHEMAS

Filter objects

database1

Tables

employeeetable

Columns

- employeeid
- first name
- last name
- Age

Indexes

Foreign Keys

Administration Schemas

Information

Table: employeeetable

Columns:

- employeeid int(11) AI PK
- first name varchar(4)
- last name varchar(4)
- Age int(11)

Object Info Session

Limit to 1000 rows

1 • SELECT * FROM database1.employeeetable WHERE Age = '22' OR Age = '30';

2

3

Result Grid

employee id	first name	last name	Age
101	malligai	mali	22
109	pillayar	ganesha	30
110	sivoham	sivoham	22
118	auro	auro	30
123	murari	mu	30
NULL	NULL	NULL	NULL

employeeetable 8 x

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
59	20:55:25	SELECT * FROM database1.employeeetable WHERE Age = 2...	5 row(s) returned	0.000 sec / 0.000 sec
60	20:57:15	SELECT * FROM database1.employeeetable WHERE Age = 2...	5 row(s) returned	0.000 sec / 0.000 sec

Step 10 : start querying database - AND query

The screenshot shows the MySQL Workbench interface. The SQL editor contains the query: `SELECT * FROM database1.employeeetable WHERE Age = '22' AND Age = '30';`. The word `AND` is highlighted in yellow. The left sidebar shows the 'SCHEMAS' tree with 'database1' expanded, showing 'employeeetable' and its columns: 'employeeid', 'first name', 'last name', and 'Age'. The 'Information' pane shows the table structure for 'employeeetable'.

The 'Result Grid' shows the query results. The columns are 'employee id', 'first name', 'last name', and 'Age'. The results are all NULL.

The 'Output' pane shows the execution log. The first row shows the query execution at 20:57:15, returning 5 rows. The second row shows the query execution at 20:58:33, returning 0 rows.

#	Time	Action	Message	Duration / Fetch
60	20:57:15	SELECT * FROM database1.employeeetable WHERE Age = '22'...	5 row(s) returned	0.000 sec / 0.000 sec
61	20:58:33	SELECT * FROM database1.employeeetable WHERE Age = '22' AND Age = '30';	0 row(s) returned	0.000 sec / 0.000 sec

Step 11: start querying database - NOT query

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
SELECT * FROM database1.employeeetable WHERE NOT Age = '22';
```

The query results are displayed in the Result Grid, showing 22 rows of data. The columns are employee id, first name, last name, and Age.

employee id	first name	last name	Age
114	hanuman	hanuman	26
115	chalisa	chalisa	27
116	sai	sai	28
117	baba	baba	29
118	auro	auro	30
119	mira	mira	31
120	saraswathi	saraswathi	32
121	vishnu	vishnu	28
122	brahma	brahma	29
123	murari	mu	30
1241	meera	mer	31

The Output tab shows the execution of the query, indicating that 22 row(s) were returned.

#	Time	Action	Message	Duration / Fetch
62	21:00:59	SELECT * FROM database1.employeeetable WHERE NOT Age = '22'...	3 row(s) returned	0.000 sec / 0.000 sec
63	21:01:13	SELECT * FROM database1.employeeetable WHERE NOT Age = '22' LI...	22 row(s) returned	0.000 sec / 0.000 sec

Step 12: start querying database - AND, OR query

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 • SELECT * FROM database1.employeeetable WHERE Age = '22' AND (Age = '30' OR Age = '23') ;
2
3
```

The left sidebar shows the Schemas pane with the following structure:

- database1
 - Tables
 - employeeetable
 - Columns
 - employee id
 - first name
 - last name
 - Age
 - Indexes
 - Foreign Keys

The bottom left pane shows the table structure for **employeeetable**:

Columns:	
employee id	int(11)
id	AI PK
first name	varchar(4)
last name	varchar(4)
Age	int(11)

The right pane shows the Result Grid with the following data:

employee id	first name	last name	Age
NULL	NULL	NULL	NULL

The bottom right pane shows the Output tab with the following data:

#	Time	Action	Message	Duration / Fetch
62	21:00:59	SELECT * FROM database1.employeeetable WHERE NOT Age = '22' AND Age = '30' ...	3 row(s) returned	0.000 sec / 0.000 sec
63	21:01:13	SELECT * FROM database1.employeeetable WHERE NOT Age = '22' LIMIT 0, 1000	22 row(s) returned	0.000 sec / 0.000 sec
64	21:05:53	SELECT * FROM database1.employeeetable WHERE Age = '22' AND (Age = '30' OR ...	0 row(s) returned	0.016 sec / 0.000 sec

Step 13 : start querying database - ORDER BY ASC query

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

database1

Tables

employeeetable

Columns

employee id

first name

last name

Age

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

database3

Tables

Views

Stored Procedures

Administration Schemas

Information

Table: employeeetable

Columns:

employee id int(11)
AI PK
first name varchar(4)
last name varchar(4)
Age int(11)

Object Info Session

database1.employeeetable actor database1.employeeetable employeeetable - Table employeeetable - Table employeeetable sql 1

Limit to 1000 rows

```
1 • SELECT * FROM database1.employeeetable ORDER BY Age ASC;
```

2

3

Result Grid

Filter Rows:

Edit: Export/Import: Wrap Cell Content:

employee id	first name	last name	Age
101	malligai	mali	22
110	sivoham	sivoham	22
102	bri	man	23
111	buddhi	buddhi	23
112	siddhi	siddhi	24
103	mun	bun	25
104	gandhi	gandhi	25
113	mahaveer	mahaveer	25
105	mahatma	mahatma	26
114	hanuman	hanuman	26
106	indira	gandhi	27
115	chalisa	chalisa	27
107	jawaharlal	nehru	28
116	rai	rai	28

employeeetable 13

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
41	13:30:15	SELECT * FROM database1.employeeetable LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
42	13:31:37	SELECT * FROM database1.employeeetable LIMIT 0, 1000	0 row(s) returned	0.016 sec / 0.000 sec

Step 14 : start querying database - ORDER BY DESC query

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: database1.employeeetable actor database1.employeeetable employeeetable - Table employeeetable - Table employeeetable sql1*

SCHEMAS

Filter objects

database1

Tables

employeeetable

Columns

- employee id
- first name
- last name
- Age

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

database3

Tables

Views

Stored Procedures

Administration Schemas

Information

Table: employeeetable

Columns:

- employee id int(11) AI PK
- first name varchar(4)
- last name varchar(4)
- Age int(11)

Object Info Session

1 • SELECT * FROM database1.employeeetable ORDER BY Age DESC;

2

3

Result Grid

Filter Rows:

Limit to 1000 rows

employee id	first name	last name	Age
120	saraswathi	saraswathi	32
119	mira	mira	31
1241	meera	mer	31
109	pillayar	ganesha	30
118	auro	auro	30
123	murari	mu	30
108	lakshmi	lakshmi	29
117	baba	baba	29
122	brahma	brahma	29
107	jawaharlal	nehru	28
116	sai	sai	28
121	vishnu	vishnu	28
106	indira	gandhi	27
115	chalisa	chalisa	27

employeeetable 15 x

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
67	21:21:17	SELECT * FROM database1.employeeetable ORDER BY Age DESC LIMIT 0, 1000	24 row(s) returned	0.000 sec / 0.000 sec
68	21:21:34	SELECT * FROM database1.employeeetable ORDER BY Age DESC LIMIT 0, 1000	24 row(s) returned	0.000 sec / 0.000 sec

Step 15 : start querying database - LIKE PATTERN '%2%' query

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: loyeetable actor database1.employeeetable employeeetable - Table employee table employeeetable - Table employeeetable sql11

SCHEMAS

Filter objects

- database1
 - Tables
 - employeeetable
 - Columns
 - employee id
 - first name
 - last name
 - Age
 - Indexes
 - Foreign Keys
 - Triggers
 - Views
 - Stored Procedures
 - Functions
 - database3
 - Tables
 - Views
 - Stored Procedures
 - Functions

Administration Schemas

Information

Table: employeeetable

Columns:

- employee id int(11) AI PK
- first name varchar(4)
- last name varchar(4)
- Age int(11)

Object Info Session

1 • SELECT * FROM database1.employeeetable WHERE Age LIKE '%2%';

2

3

Result Grid

employee id	first name	last name	Age
101	malligai	mali	22
102	bri	man	23
103	mun	bun	25
104	gandhi	gandhi	25
105	mahatma	mahatma	26
106	indira	gandhi	27
107	jawaharlal	nehru	28
108	lakshmi	lakshmi	29
110	sivoham	sivoham	22
111	buddhi	buddhi	23
112	siddhi	siddhi	24
113	mahaveer	mahaveer	25
114	hanuman	hanuman	26
115	chalisa	chalisa	27
116	sai	sai	28
117	baba	baba	29

employeeetable 16 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
66	21:18:00	SELECT * FROM database1.employeeetable ORDER BY A...	24 row(s) returned	0.000 sec / 0.000 sec

Step 16: start querying database - LIKE PATTERN '%2' query

The screenshot shows the MySQL Workbench interface with a query executed in the SQL editor. The query is: `SELECT * FROM database1.employeeetable WHERE Age LIKE '%2';`. The results are displayed in the Result Grid, showing three rows of data. The left sidebar shows the Schemas pane with the database1 schema expanded, and the employeeetable table selected. The bottom pane shows the Action Output, indicating that the query was executed successfully and returned 24 rows.

Table: employeeetable

Columns:

- employee id: int(11) AI PK
- first name: varchar(4)
- last name: varchar(4)
- Age: int(11)

Result Grid:

employee id	first name	last name	Age
101	malligai	mali	22
110	sivoham	sivoham	22
120	saraswathi	saraswathi	32
NULL	NULL	NULL	NULL

Action Output:

#	Time	Action	Message	Duration / Fetch
66	21:18:00	SELECT * FROM database1.employeeetable ORDER BY Ag...	24 row(s) returned	0.000 sec / 0.000 sec
67	21:21:17	SELECT * FROM database1.employeeetable ORDER BY Ag...	24 row(s) returned	0.000 sec / 0.000 sec

Step 17: start querying database - LIKE PATTERN '3%' query

The screenshot shows the MySQL Workbench interface with a query executed in the SQL editor. The query is: `SELECT * FROM database1.employee table WHERE Age LIKE '3%';`. The result grid displays 6 rows of data from the `employee table`.

employee id	first name	last name	Age
109	pillayar	ganesha	30
118	auro	auro	30
119	mira	mira	31
120	saraswathi	saraswathi	32
123	murari	mu	30
1241	meera	mer	31

The Action Output pane shows the execution details:

#	Time	Action	Message	Duration / Fetch
82	22:16:40	SELECT * FROM database1.employee table WHERE Age L...	0 row(s) returned	0.000 sec / 0.000 sec
83	22:16:56	SELECT * FROM database1.employee table WHERE Age L...	6 row(s) returned	0.000 sec / 0.000 sec

Step 18 : start querying database - BETWEEN, AND query

The screenshot shows the MySQL Workbench interface with a query executed in the SQL editor. The query is:

```
SELECT Age FROM database1.employeeetable WHERE (Age BETWEEN '30' AND '32');
```

The result grid displays the following data:

Age
30
30
31
32
30
31

The bottom panel shows the Action Output with the following details:

#	Time	Action	Message	Duration / Fetch
83	22:16:56	SELECT * FROM database1.employeeetable WHERE Age L...	6 row(s) returned	0.000 sec / 0.000 sec
84	14:01:58	SELECT Age FROM database1.employeeetable WHERE (A...	6 row(s) returned	0.000 sec / 0.000 sec

STEP 19: IS NOT NULL QUERY

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: loyeetable actor database1.employeeetable employeeetable - Table employee table employeeetable - Table employeeetable sqj1*

SCHEMAS

Filter objects

database1

Tables

employeeetable

Columns

- employee id
- first name
- last name
- Age

Indexes

Foreign Keys

Triggers

Views

Stored Procedures

Functions

database3

Tables

Views

Administration Schemas

Information

Table: employeeetable

Columns:

- employee id int(11)
- first name AI PK
- last name varchar(4)
- Age varchar(4)

Object Info Session

1 • SELECT * FROM database1.employeeetable WHERE Age IS NOT NULL;

2

3

Limit to 1000 rows

Result Grid

employee id	first name	last name	Age
101	malligai	malli	22
102	bri	man	23
103	mun	bun	25
104	gandhi	gandhi	25
105	mahatma	mahatma	26
106	indira	gandhi	27
107	jawaharlal	nehru	28
108	lakshmi	lakshmi	29
109	pillayar	ganesha	30
110	sivoham	sivoham	22
111	buddhi	buddhi	23
112	siddhi	siddhi	24
113	mahaveer	mahaveer	25

employeeetable 24 x

Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
55	20:39:03	SELECT * FROM database1.employeeetable LIMIT 0, 1000	24 row(s) returned	0.000 sec / 0.000 sec
56	20:43:56	SELECT * FROM database1.employeeetable ORDER BY Ag...	24 row(s) returned	0.000 sec / 0.000 sec

STEP 20: IS NULL QUERY

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL statement:

```
SELECT * FROM database1.employeeTable WHERE Age IS NULL;
```

The query has been executed, and the results are displayed in the 'Result Grid' tab. The grid shows four columns: 'employee id', 'first name', 'last name', and 'Age'. All four columns in the single row of results are marked as 'NULL'.

Below the result grid, the 'Output' tab is active, showing the 'Action Output' for the query. It displays two rows of execution details:

#	Time	Action	Message	Duration / Fetch
84	14:01:58	SELECT Age FROM database1.employeeTable WHERE (A...	6 row(s) returned	0.000 sec / 0.000 sec
85	14:04:01	SELECT * FROM database1.employeeTable WHERE Age I...	0 row(s) returned	0.000 sec / 0.000 sec

The 'Table: employeeTable' structure is visible in the left-hand 'SCHEMAS' pane:

Table: employeeTable

Columns:

- employee id: int(11)
- id: AI PK
- first name: varchar(4)
- last name: varchar(4)
- Age: int(11)