



Gestión de Usuarios en MySQL



Gestión de Usuarios en MySQL

Objetivos:

- Describir el sistema de Control de Acceso a un *Gestor MySQL*
- Describir los niveles de privilegios de usuarios en MySQL (Comandos GRANT, REVOKE, CREATE USER, DROP USER).
- Crear cuentas de usuario.
- Presentar ejemplos prácticos.



Índice

1. Acceso usuarios del Sistema Gestor MySQL
2. Crear usuarios del sistema.
3. Otorgar privilegios al usuario (Comando GRANT):
 - Nivel Global,
 - Nivel de Base de Datos,
 - Nivel de Tabla,
 - Nivel de Rutina.
4. Revocación de privilegios de usuario (Comando Revoke).
5. Ejemplos Prácticos.



Control de Acceso BD

- **Nivel 1: Comprobación de la conexión:**
 - Desde dónde se conecta el usuario,
 - Nombre del usuario,
 - Consulta a tabla "user" (*host, user, password*). (Base de Datos de Gestión *mysql*).
- **Nivel 2: Comprobación de privilegios**
 - Por cada petición en la conexión se comprueba si hay privilegios para efectuarla.
 - Consulta a tablas *db, tables_priv, columns_priv, procs_priv*. (Base de Datos de Gestión *mysql*)

Usuarios del sistema (I)

SELECT * from mysql.user;

The screenshot shows the MySQL Workbench interface. The query editor contains the SQL statement `SELECT * from mysql.user;`. The Result Grid displays the output of this query, showing the privileges for the 'root' user. The table has 12 columns: Host, User, Password, Select_priv, Insert_priv, Update_priv, Delete_priv, Create_priv, Drop_priv, Reload_priv, Shutdown_priv, and Process_priv. The 'root' user is listed with full privileges (Y) for all except Password, which is NULL. The 'pma' user is listed with no privileges (N) for all. The 'cdcol' user is listed with NULL for all fields.

Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Reload_priv	Shutdown_priv	Process_priv
localhost	pma		N	N	N	N	N	N	N	N	N
%	root		Y	Y	Y	Y	Y	Y	Y	Y	Y
*	cdcol		NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The Output pane shows the following message:

```
1 12:11:13 SELECT * from mysql.user LIMIT 0, 1000
2 row(s) returned
0.000 sec / 0.000 sec
```

Usuarios del sistema (II)

localhost / localhost | phpMyAdmin 3.2.0.1 - Windows Internet Explorer

http://localhost/phpmyadmin/

Archivo Edición Ver Favoritos Herramientas Ayuda

localhost / localhost / mysql / ... localhost / localhost | php...

phpMyAdmin

- cdcol (1)
- information_schema (29)
- mysql (23)
- phpmyadmin (8)
- test

Seleccionar una base de datos

Servidor: localhost

Bases de datos SQL Estado actual Variables Juegos de caracteres Motores Privilegios Procesos Exportar Importar

Vista global de usuarios

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [Mostrar todo]

	Usuario	Servidor	Contraseña	Privilegios globales ¹	Conceder	
<input type="checkbox"/>	pma	localhost	No	USAGE	No	
<input type="checkbox"/>	root	%	No	ALL PRIVILEGES	Sí	

↑ Marcar todos/as / Desmarcar todos



SQL

Structured Query Language

- Un Lenguaje de Definición de Datos (Data Definition Language, DDL)
 - Tareas de definición de las estructuras que almacenarán los datos (CREATE, DROP , ALTER, TRUNCATE)
- Lenguaje de Manipulación de Datos (Data Manipulation Language, DML)
 - Tareas de consulta o manipulación de los datos (SELECT, INSERT, DELETE Y UPDATE)
- Lenguaje de Control de Datos (Data Control Language, DCL)
 - Controlar el acceso a los datos contenidos en la Base de Datos (GRANT, REVOKE)



Comando GRANT (I)

GRANT

```
priv_type [(column_list)] [, priv_type [(column_list)]] ...  
ON [object_type] priv_level  
TO user [auth_option] [, user [auth_option]] ...  
[REQUIRE {NONE | tls_option [[AND] tls_option] .}]  
[WITH {GRANT OPTION | resource_option} ...]
```

tls_option: {

SSL

| X509

| CIPHER 'cipher'

| ISSUER 'issuer'

| SUBJECT 'subject'

}

resource_option: {

| MAX_QUERIES_PER_HOUR count

| MAX_UPDATES_PER_HOUR count

| MAX_CONNECTIONS_PER_HOUR count

| MAX_USER_CONNECTIONS count

}



Comando GRANT (II)

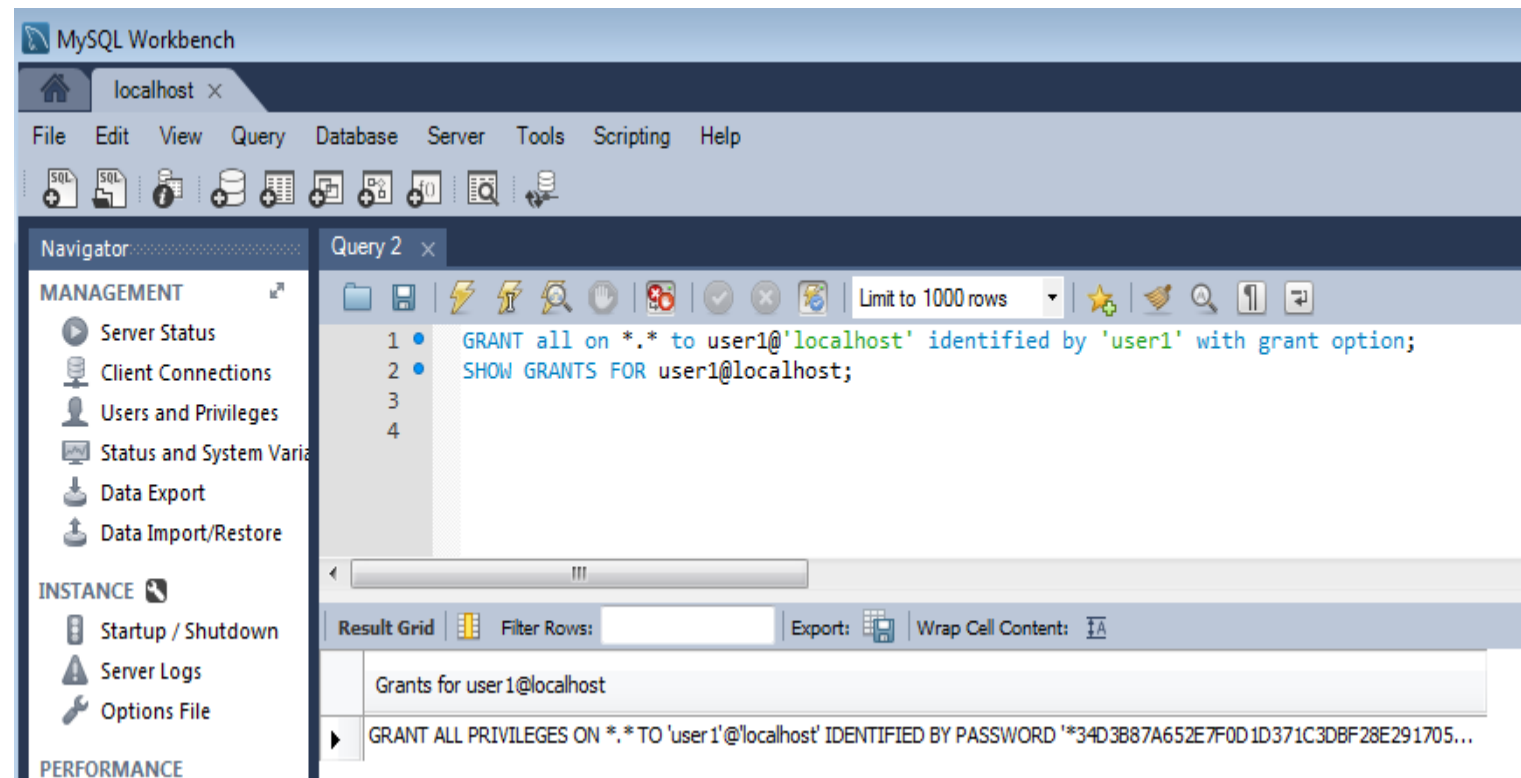
```
GRANT ALL [PRIVILEGES] ON *.* TO 'user1'@'localhost' IDENTIFIED BY 'user1'  
WITH GRANT OPTION {REQUIRE (...)};
```

Comando que permite 'conceder' privilegios a un usuario

- **ALL:** se conceden todos los privilegios a este usuario. Los posibles privilegios: SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, REFERENCES, INDEX, ALTER, CREATE_TMP_TABLE, LOCK_TABLES, CREATE_VIEW, SHOW_VIEW, CREATE_ROUTINE, ALTER_ROUTINE, EXECUTE y GRANT.
- **ON:** los objetos a los que se aplican los privilegios, el formato es `base_de_datos.tabla`, `*.*` Otros ejemplos: `ventas.*`, `contabilidad.polizas`,
- **TO:** el usuario al que se le conceden los privilegios, el formato es `usuario@'equipo'`. Otros ejemplos: `user1@'%'`, `sergio@'192.168.10.132'`
- **IDENTIFIED BY:** la contraseña se indica en esta parte y se escribe en texto plano.
- **WITH GRANT OPTION:** esta última parte es opcional, e indica que el usuario en cuestión puede a la vez otorgar privilegios a otros usuarios.
- **REQUIRE:** Opciones de seguridad en el acceso relacionadas con SSL.

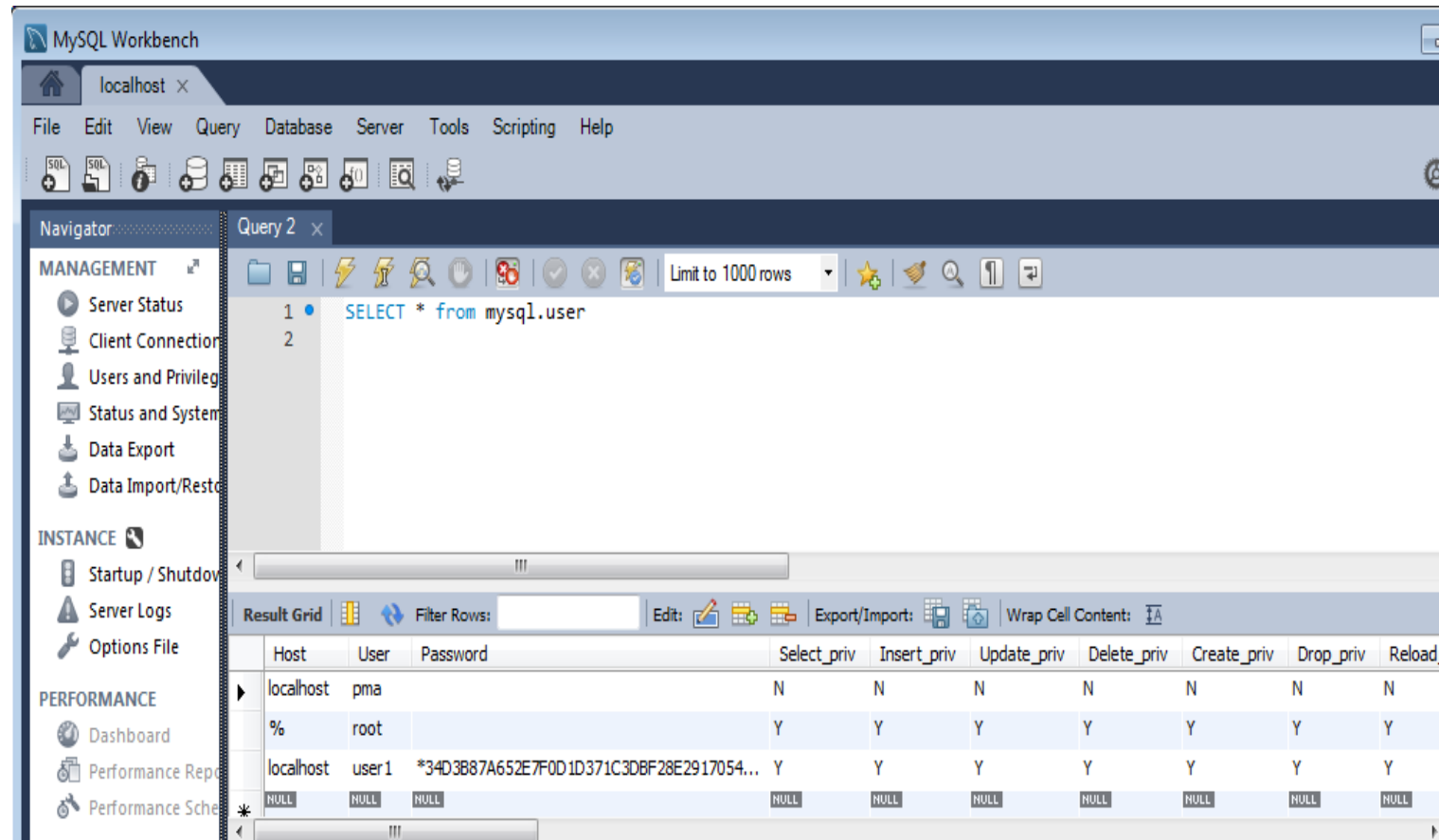
Crear un usuario, Privilegios Globales (I)

**GRANT ALL ON *.* to 'user1'@'localhost' identified by 'user1' with grant option;
SHOW GRANTS FOR 'user1'@'localhost';**



Crear un usuario, Privilegios Globales (II)

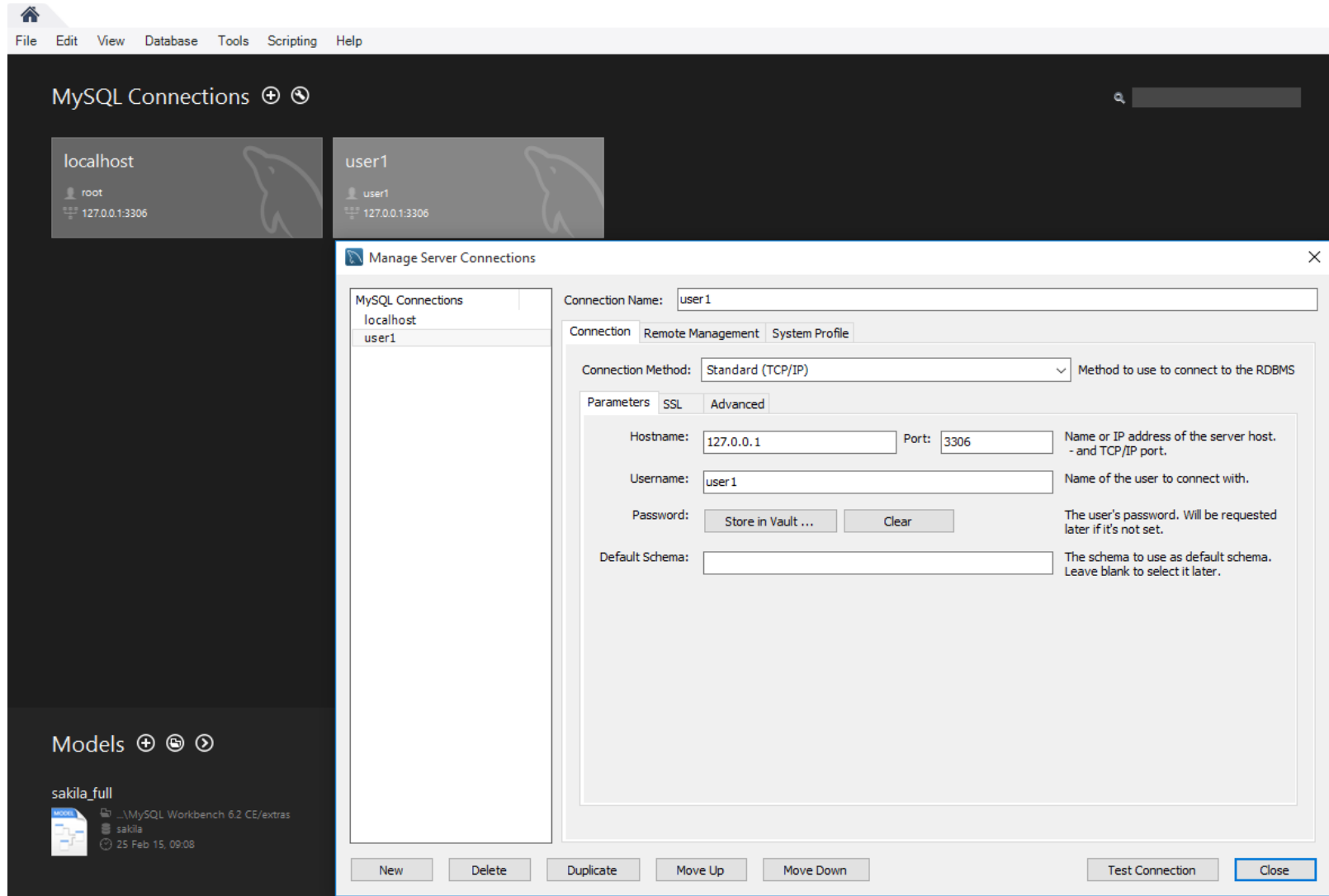
SELECT * from mysql.user;



The screenshot shows the MySQL Workbench interface. The 'Query 2' tab is active, displaying the SQL query `SELECT * from mysql.user;`. The 'Result Grid' shows the output of the query, which lists the users and their privileges. The results are as follows:

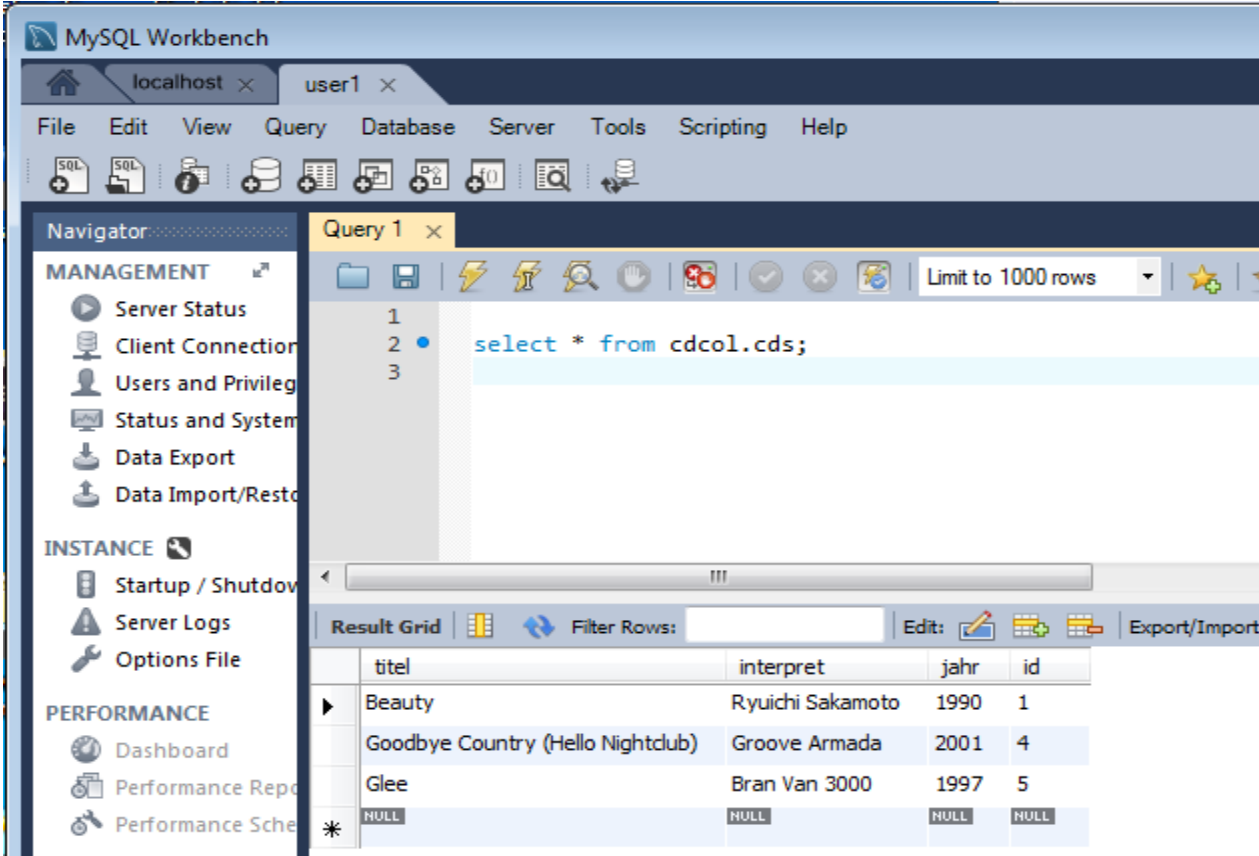
Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Reload_priv
localhost	pma		N	N	N	N	N	N	N
%	root		Y	Y	Y	Y	Y	Y	Y
localhost	user1	*34D3B87A652E7F0D1D371C3DBF28E2917054...	Y	Y	Y	Y	Y	Y	Y
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Crear un usuario, Privilegios Globales (III)



Crear un usuario, Privilegios Globales (IV)

`SELECT * from cdcol.cds;`



The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the query `select * from cdcol.cds;`. The 'Result Grid' shows the following data:

titel	interpret	jahr	id
Beauty	Ryuichi Sakamoto	1990	1
Goodbye Country (Hello Nightclub)	Groove Armada	2001	4
Glee	Bran Van 3000	1997	5
NULL	NULL	NULL	NULL



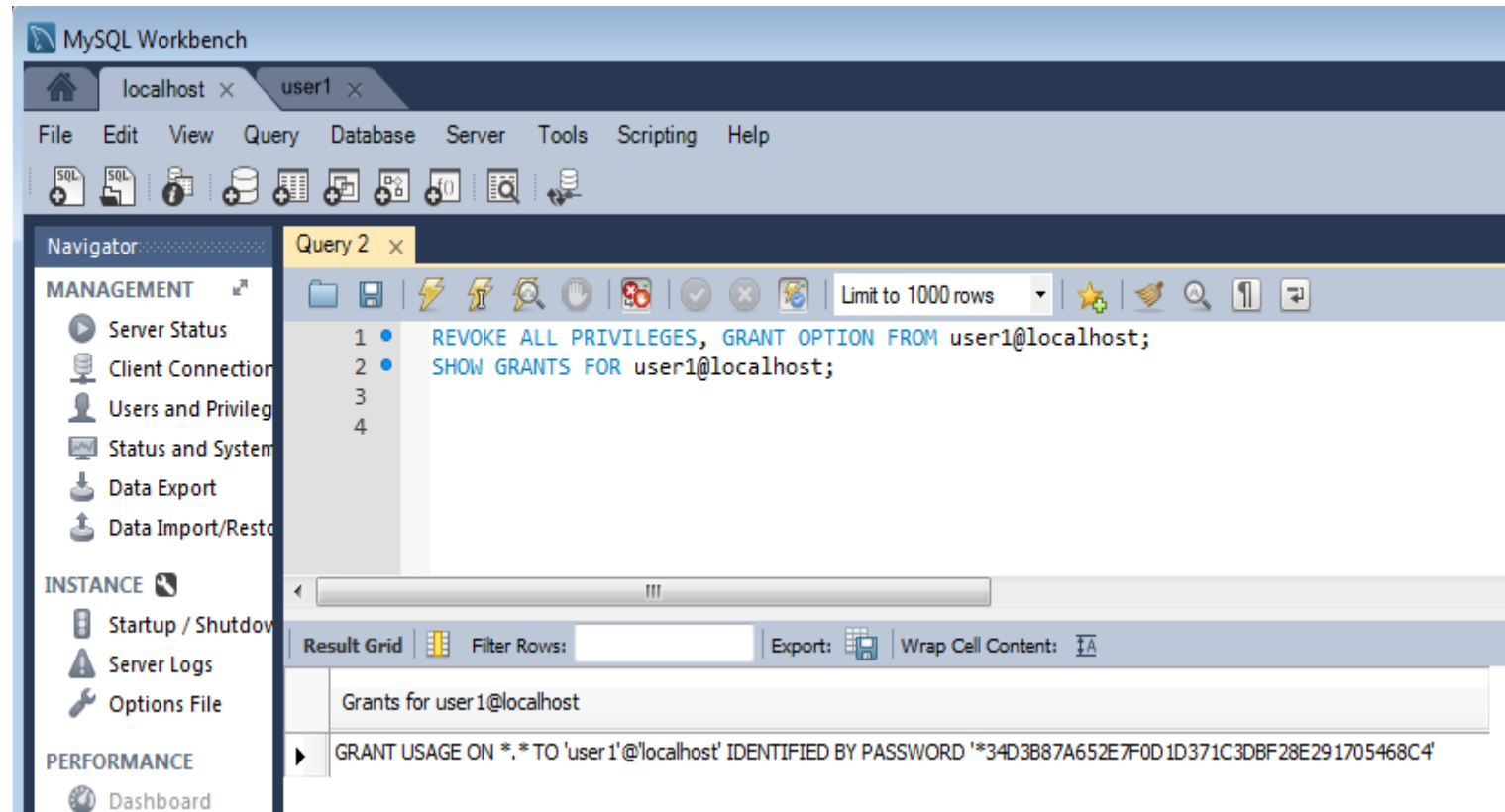
Comando REVOKE

```
REVOKE priv_type [(column_list)] [, priv_type [(column_list)]]  
...  
ON [object_type] {tbl_name | * | *.* | db_name.*}  
FROM user [, user] ...
```

- Permite revocar los privilegios del usuario otorgados con el comando GRANT.
- La revocación se puede hacer al mismo nivel de privilegios otorgados con el comando GRANT y también de forma global.

Revocar privilegios (I)

REVOKE ALL PRIVILEGES, GRANT OPTION FROM user1@localhost;
SHOW GRANTS FOR user1@localhost;



Revocar privilegios (II)

SELECT * from mysql.user;

The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the SQL query: `SELECT * from mysql.user;`. The 'Result Grid' is visible, showing the output of the query. The table has columns: Host, User, Password, Select_priv, Insert_priv, Update_priv, Delete_priv, Create_priv, and Drop_priv. The output shows three rows of user data.

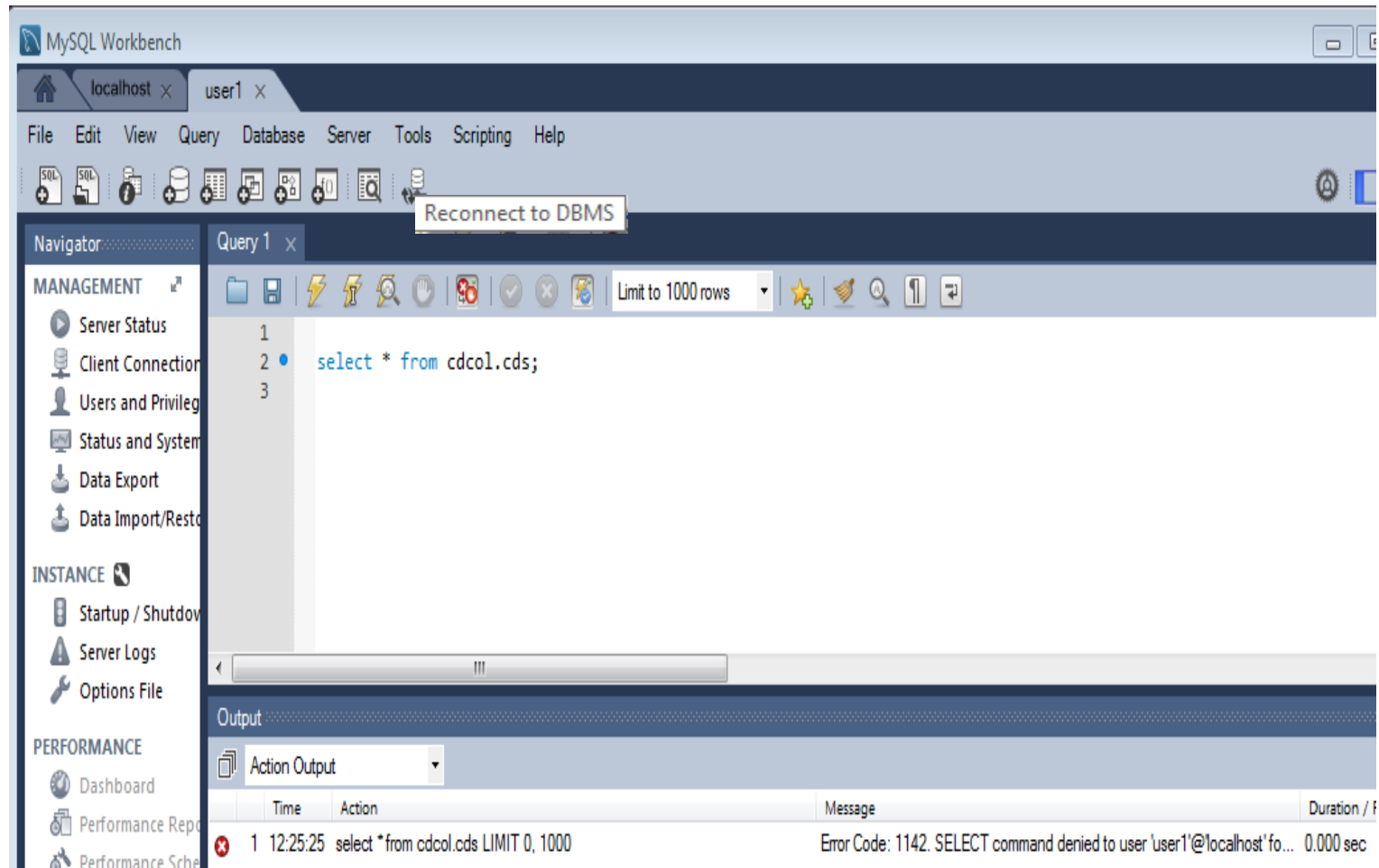
Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv
localhost	user1	*34D3887A652E7F0D1D371C3DBF28E2917054...	N	N	N	N	N	N
localhost	pma		N	N	N	N	N	N
%	root		Y	Y	Y	Y	Y	Y

Below the Result Grid, the 'Output' tab is selected, showing the 'Action Output' for the query execution. The output indicates that the query was successful and returned 3 rows.

Time	Action	Message	Duration / Fetch
1 13:48:19	SELECT * from mysql.user LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Revocar privilegios (III)

SELECT * from cdcol.cds;



The screenshot shows the MySQL Workbench interface. The 'Query 1' tab contains the SQL statement `select * from cdcol.cds;`. The 'Output' panel at the bottom displays an error message: 'Error Code: 1142. SELECT command denied to user 'user1'@'localhost' fo... 0.000 sec'. The left sidebar shows the 'MANAGEMENT' section with options like 'Server Status', 'Client Connection', 'Users and Privileges', 'Status and System', 'Data Export', and 'Data Import/Restore'. The 'INSTANCE' section includes 'Startup / Shutdown', 'Server Logs', and 'Options File'. The 'PERFORMANCE' section includes 'Dashboard', 'Performance Report', and 'Performance Schema'.

Time	Action	Message	Duration / f
1 12:25:25	select * from cdcol.cds LIMIT 0, 1000	Error Code: 1142. SELECT command denied to user 'user1'@'localhost' fo...	0.000 sec

Eliminar un usuario (I)

DROP USER 'user1'@'localhost';

The screenshot shows the MySQL Workbench interface. The 'Query 2' tab is active, displaying the following SQL code:

```
1
2 DROP USER user1@localhost;
3 SELECT * from mysql.user
4
5
```

Below the query editor, the 'Result Grid' shows the output of the query. The table has 13 columns: Host, User, Password, Select_priv, Insert_priv, Update_priv, Delete_priv, Create_priv, Drop_priv, Reload_priv, Shutdown_priv, Process_priv, and F. The data is as follows:

Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Reload_priv	Shutdown_priv	Process_priv	F
localhost	pma		N	N	N	N	N	N	N	N	N	N
%	root		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
*												

Eliminar un usuario (II)

SELECT * from mysql.user

The screenshot shows the MySQL Workbench interface. The query editor contains the SQL statement `SELECT * from mysql.user`. The query has been executed, and the results are displayed in the Result Grid. The Result Grid shows two rows of data: one for the 'pma' user and one for the 'root' user. The 'root' user has full privileges across all databases and tables.

Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Reload_priv	Shutdown_priv	Process_priv
localhost	pma		N	N	N	N	N	N	N	N	N
%	root		Y	Y	Y	Y	Y	Y	Y	Y	Y

The Output pane shows the execution details: 12:11:13 SELECT * from mysql.user LIMIT 0, 1000. 2 row(s) returned. Duration / Fetch: 0.000 sec / 0.000 sec.



Niveles Privilegios

- Global
- De Base de Datos
- De Tabla
- De Columna
- De Rutina



Privilegios Nivel Global

- Los permisos globales se aplican a todas las bases de datos de un servidor dado.
- Estos privilegios son almacenados en la tabla "mysql.user"
- GRANT ALL ON *.* y REVOKE ALL ON *.* otorgan y quitan sólo permisos globales.

GRANT ALL ON *.* to 'user1'@'localhost' identified by 'user1' with grant option;

REVOKE ALL PRIVILEGES, GRANT OPTION FROM user1@localhost;



Privilegios Nivel de Base de Datos (I)

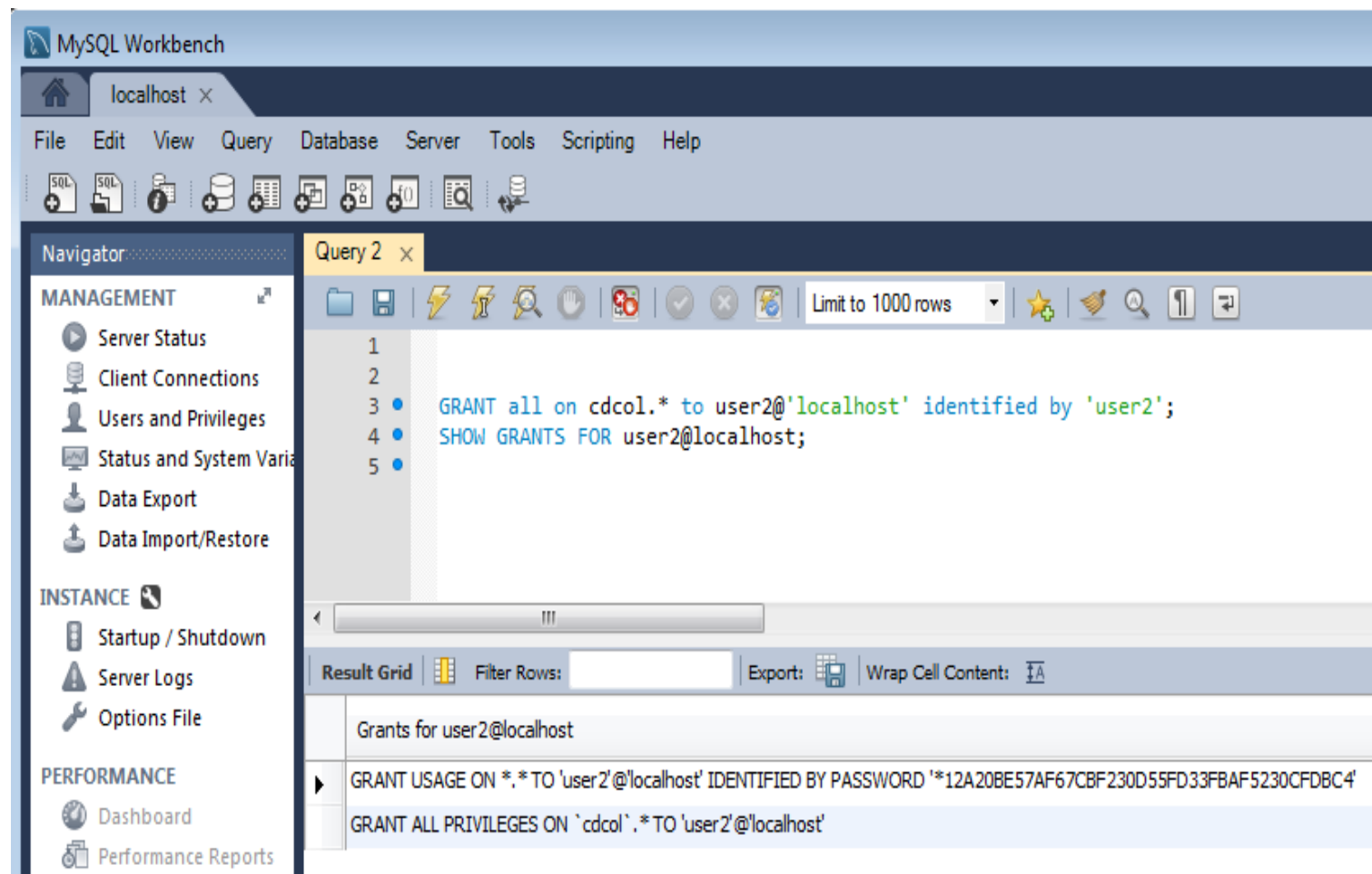
- Los permisos de base de datos se aplican a todos los objetos en una base de datos dada
- Estos permisos se almacenan en las tablas "mysql.db"
- `GRANT ALL ON db_name.*` y `REVOKE ALL ON db_name.*` otorgan y quitan sólo permisos de bases de datos.

```
GRANT ALL ON cdcol.* to user2@'localhost' identified by 'user2';
```

```
REVOKE ALL ON cdcol.* FROM 'user2'@'localhost';
```

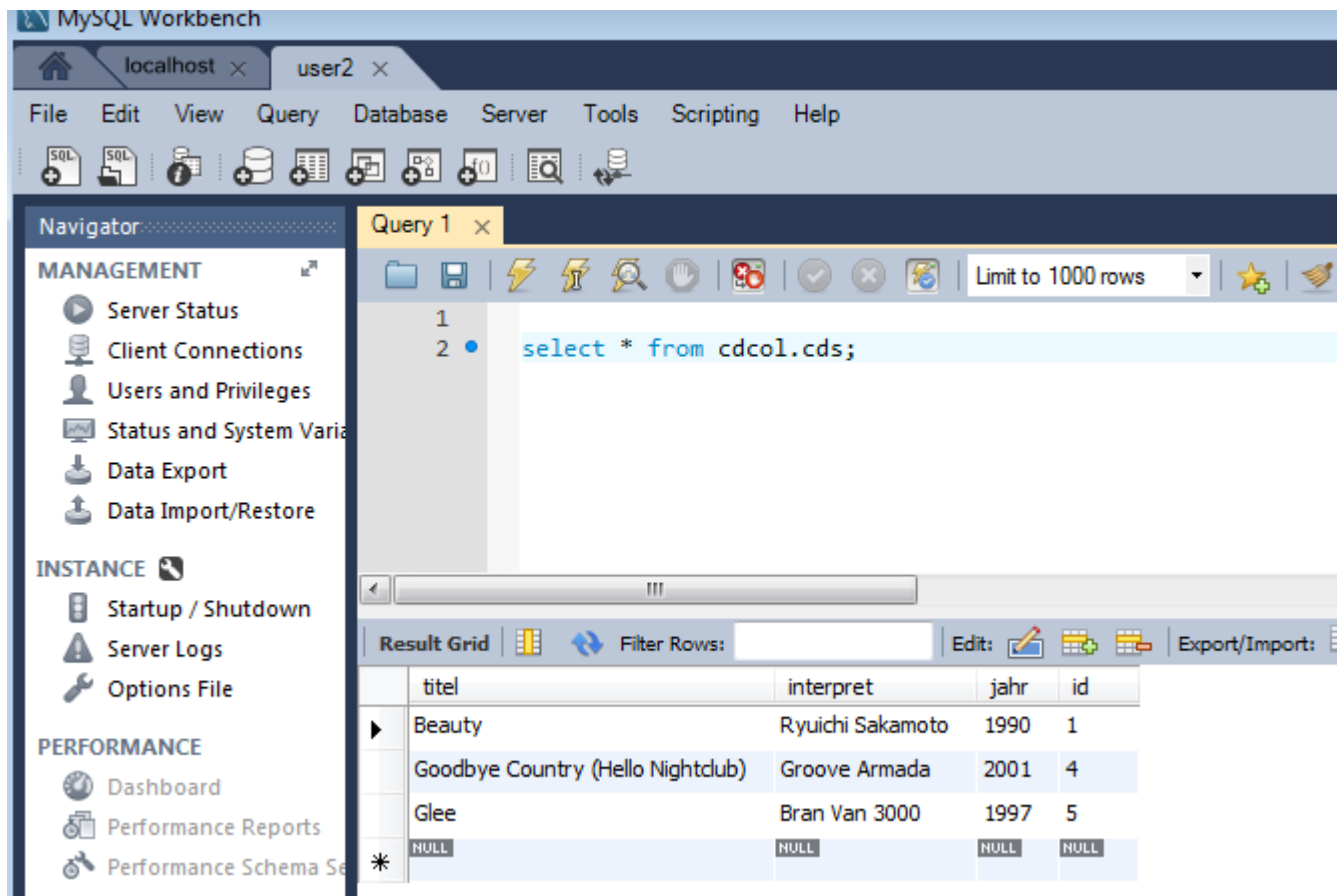
Privilegios Nivel de Base de Datos (II)

GRANT ALL ON cdc.* to user2@'localhost' identified by 'user2';
SHOW GRANTS FOR user2@localhost;



Privilegios Nivel de Base de Datos (III)

```
SELECT * from cdcol.cds;
```

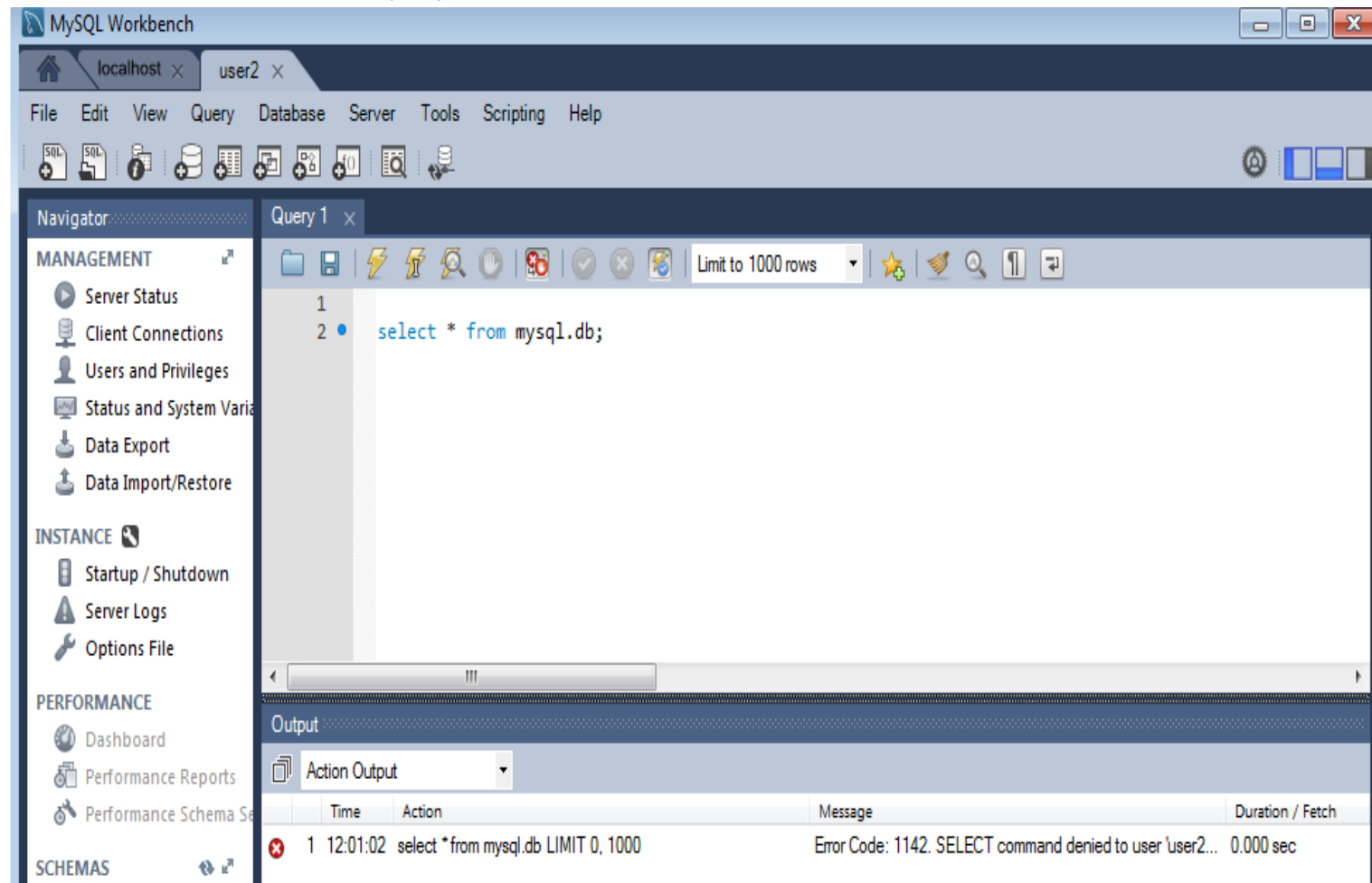


The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the query `select * from cdcol.cds;`. The 'Result Grid' shows the following data:

	titel	interpret	jahr	id
▶	Beauty	Ryuichi Sakamoto	1990	1
	Goodbye Country (Hello Nightclub)	Groove Armada	2001	4
	Glee	Bran Van 3000	1997	5
*	NULL	NULL	NULL	NULL

Privilegios Nivel de Base de Datos (IV)

SELECT * FROM mysql.db;



Privilegios Nivel de Base de Datos (V)

The screenshot shows the phpMyAdmin interface. The left sidebar lists the database structure, with 'db' selected. The main panel displays the 'Database privileges' table for the 'db' database. The table has columns for Host, Db, User, and various privileges (Select_priv, Insert_priv, Update_priv, Delete_priv, Create_priv, Drop_priv, Grant_priv). Two rows are visible: one for 'pma' user on 'localhost' and another for 'user2' on 'localhost'. The 'user2' row has 'Y' for Select_priv, Insert_priv, Update_priv, Delete_priv, and Drop_priv, and 'N' for Create_priv and Grant_priv.

Mostrando registros 0 - 1 (2 total, La consulta tardó 0.0002 seg)

```
SELECT *  
FROM `db`  
LIMIT 0 , 30
```

Perfil/Perfilamiento [[Editar](#)] [[Explicar el SQL](#)] [[Crear código PHP](#)] [[Actualizar](#)]

Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas
Organizar según la clave: Ninguna

+ Opciones

	Host	Db	User	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Grant_priv
<input type="checkbox"/>	localhost	phpmyadmin	pma	Y	Y	Y	Y	N	N	N
<input type="checkbox"/>	localhost	cdcol	user2	Y	Y	Y	Y	Y	Y	N

Marcar todos/as / Desmarcar todos Para los elementos que están marcados:

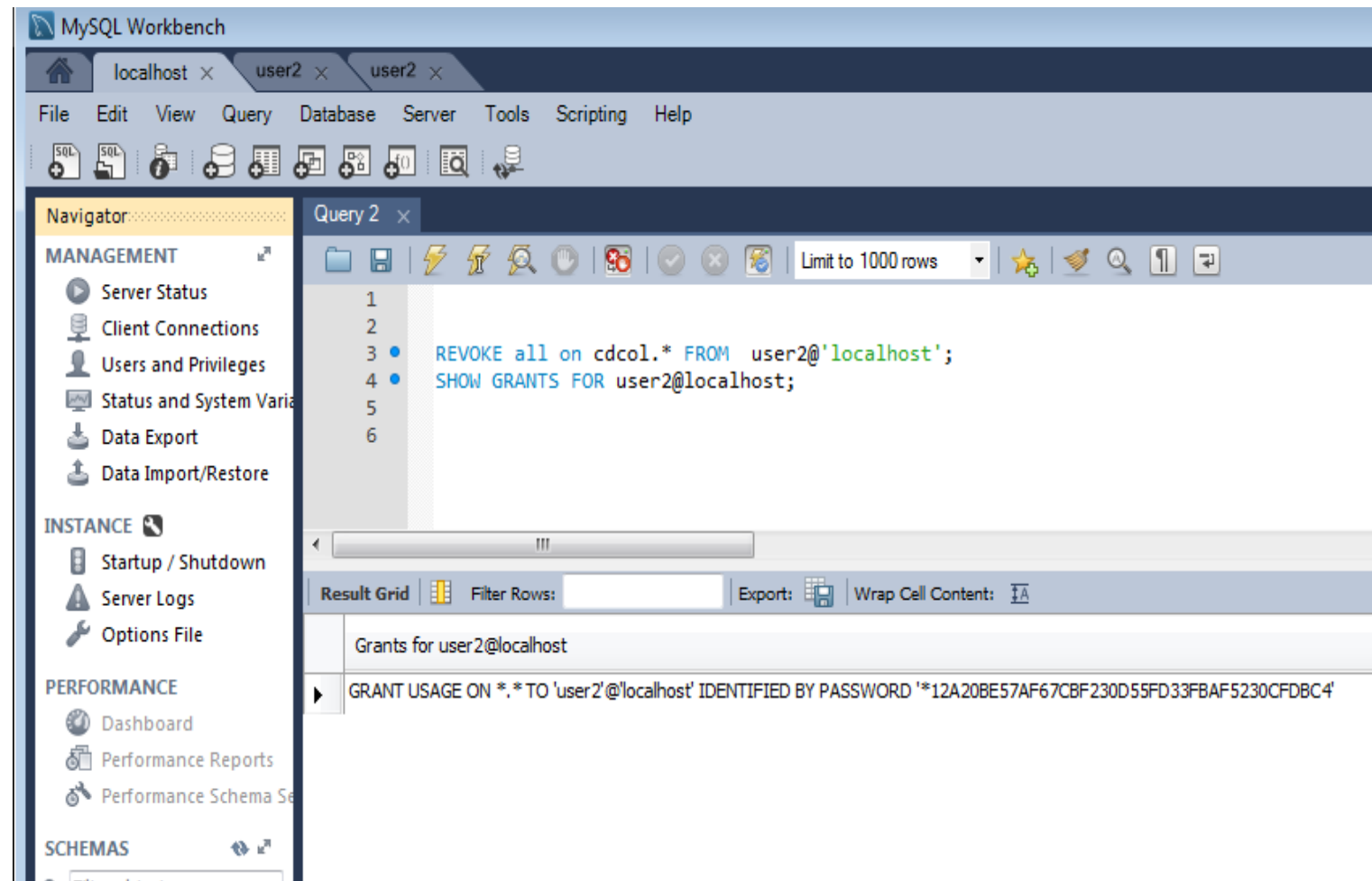
Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas

Operaciones sobre los resultados de la consulta

[Vista de impresión](#) [Previsualización para imprimir \(documento completo\)](#) [Exportar](#) [CREATE VIEW](#)

Privilegios Nivel de Base de Datos (VI)

```
REVOKE ALL ON cdcol.* FROM 'user2'@'localhost';  
SHOW GRANTS FOR 'user2'@localhost;
```



Privilegios Nivel de Base de Datos (VII)

SELECT * from cdcol.cds;

MySQL Workbench

localhost x user2 x

File Edit View Query Database Server Tools Scripting Help

Navigator: MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Query 1 x

Limit to 1000 rows

1 • select * from cdcol.cds;

Output

Action Output

	Time	Action	Message	Duration / Fetch
✗	1	13:53:46	select * from cdcol.cds LIMIT 0, 1000	Error Code: 1142. SELECT command denied to user 'user2'... 0.000 sec



Privilegios Nivel de Tabla (I)

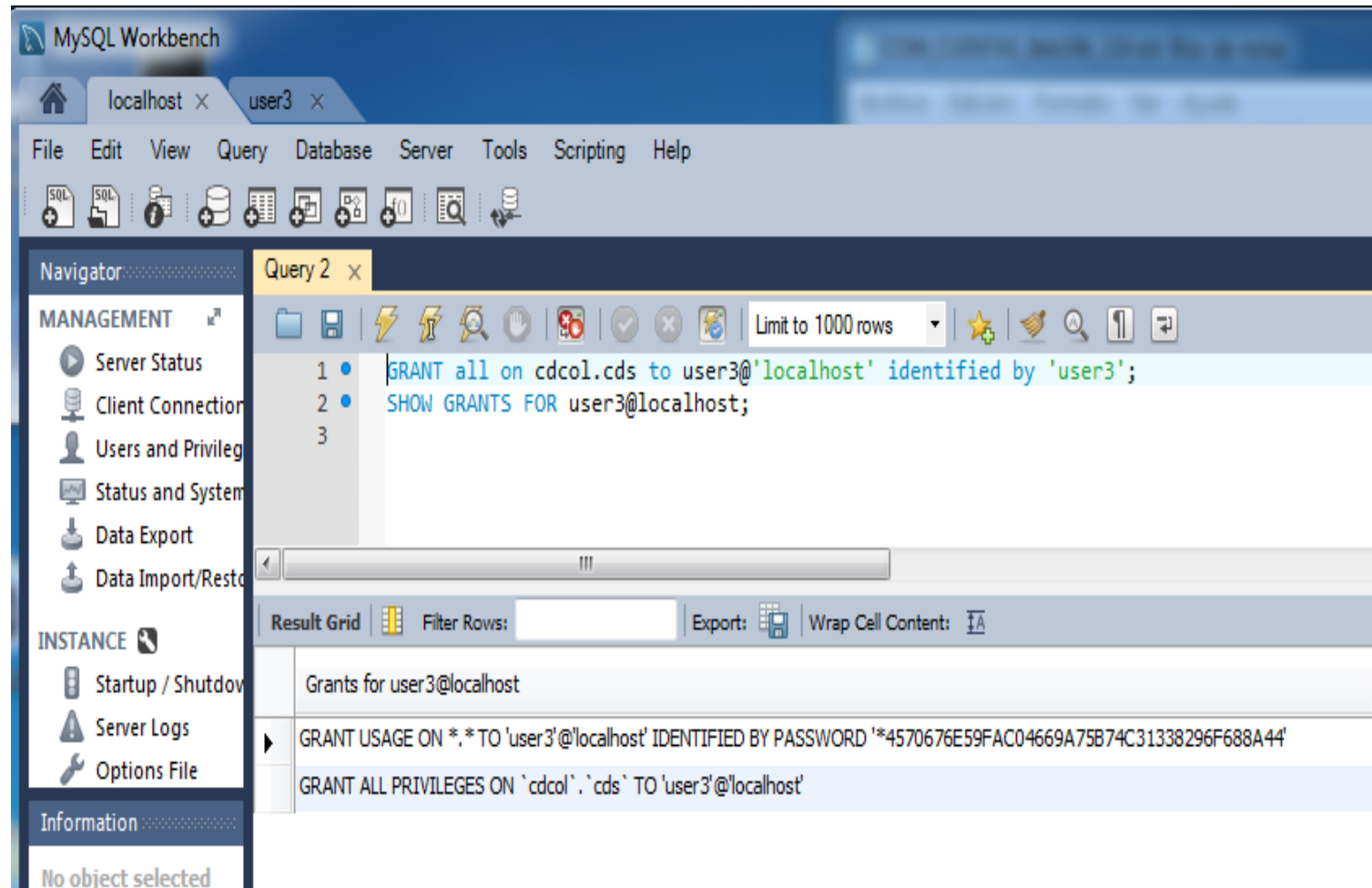
- Los permisos de tabla se aplican a todas las columnas en una tabla dada
- Estos permisos se almacenan en la tabla `mysql.tables_priv`
- `GRANT ALL ON db_name.tbl_name` y `REVOKE ALL ON db_name.tbl_name` otorgan y quitan permisos sólo de tabla.

`GRANT all on cdcol.cds to user3@'localhost' identified by 'user3';`

`REVOKE all on cdcol.cds FROM user3@'localhost';`

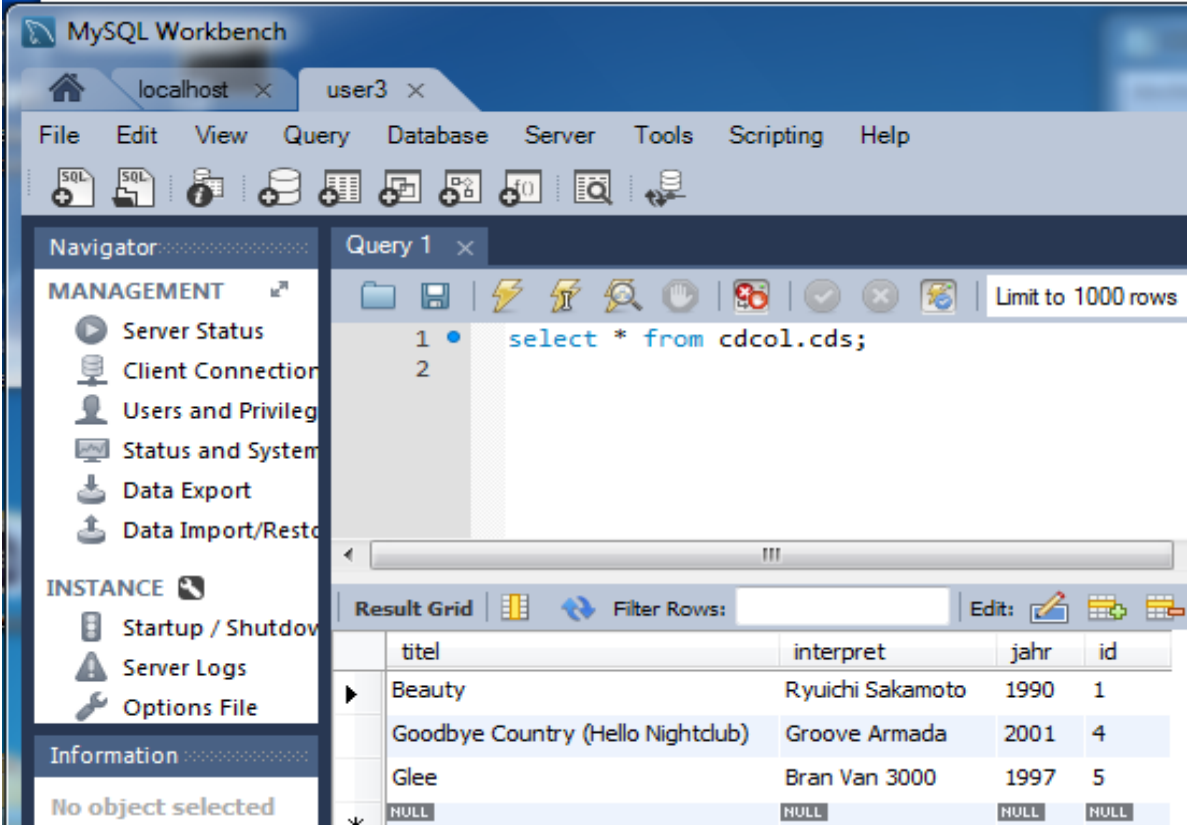
Privilegios Nivel de Tabla (II)

GRANT all on cdcol.cds to user3@'localhost' identified by 'user3';
SHOW GRANTS FOR user3@localhost;



Privilegios Nivel de Tabla (III)

`SELECT * from cdcol.cds;`



The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the query `select * from cdcol.cds;`. The 'Result Grid' is visible below the query editor, showing the results of the query. The results are displayed in a table with the following columns: `titel`, `interpret`, `jahr`, and `id`. The table contains four rows of data, plus a row of NULL values at the bottom.

titel	interpret	jahr	id
Beauty	Ryuichi Sakamoto	1990	1
Goodbye Country (Hello Nightclub)	Groove Armada	2001	4
Glee	Bran Van 3000	1997	5
NULL	NULL	NULL	NULL

Privilegios Nivel de Tabla (IV)

The screenshot shows the phpMyAdmin interface. The left sidebar lists databases, with 'mysql (23)' selected. The main panel displays the 'Table privileges' for the 'tables_priv' table in the 'mysql' database. The SQL query shown is: `SELECT * FROM `tables_priv` LIMIT 0, 30`. Below the query, there are options to show 30 rows starting from 0, in horizontal mode, with headers repeated every 100 cells. The table below shows the privileges for the 'cds' table, granted to 'user3' by 'root@localhost' on 2019-02-08. The privileges include Select, Insert, Update, Delete, Create, Drop, and References. The table has columns: Host, Db, User, Table_name, Grantor, Timestamp, and Table_priv.

Servidor: localhost ▶ Base de datos: mysql ▶ Tabla: tables_priv "Table privileges"

Examinar Estructura SQL Buscar Insertar Exportar Importar Operaciones Vaciar Eliminar

Mostrando registros 0 - 0 (1 total, La consulta tardó 0.0002 seg)

```
SELECT *
FROM `tables_priv`
LIMIT 0, 30
```

☐ Perfil/Perfilamiento [Editar] [Explicar el SQL] [Crear código PHP] [Actualizar]

Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas

+ Opciones

	Host	Db	User	Table_name	Grantor	Timestamp	Table_priv
<input type="checkbox"/>	localhost	cdcol	user3	cds	root@localhost	2019-02-08 14:16:06	Select,Insert,Update,Delete,Create,Drop,References...

↑ Marcar todos/as / Desmarcar todos Para los elementos que están marcados:

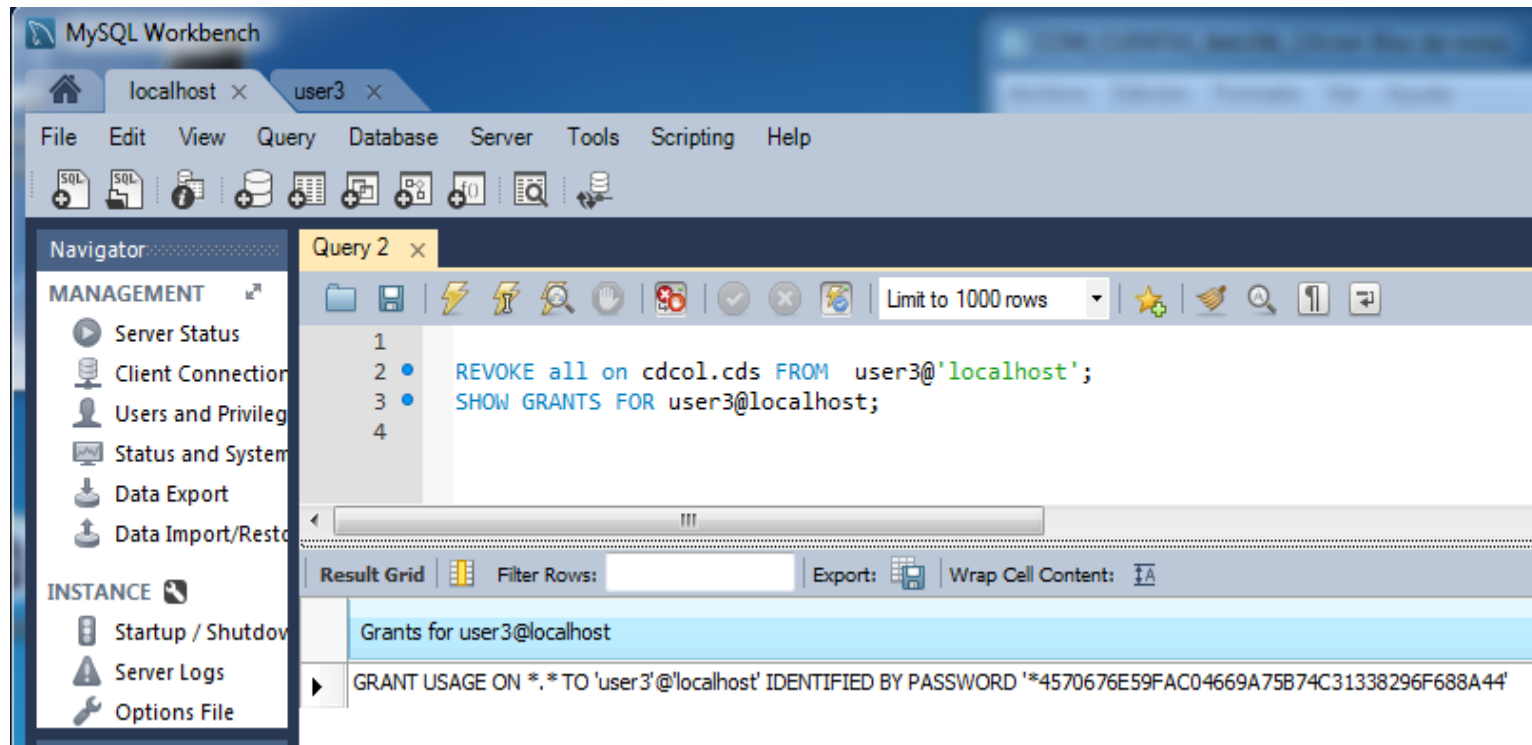
Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas

Operaciones sobre los resultados de la consulta

Vista de impresión Previsualización para imprimir (documento completo) Exportar CREATE VIEW

Privilegios Nivel de Tabla (V)

REVOKE all on cdcol.cds FROM user3@'localhost';
SHOW GRANTS FOR user3@localhost;



Privilegios Nivel de Tabla (VI)

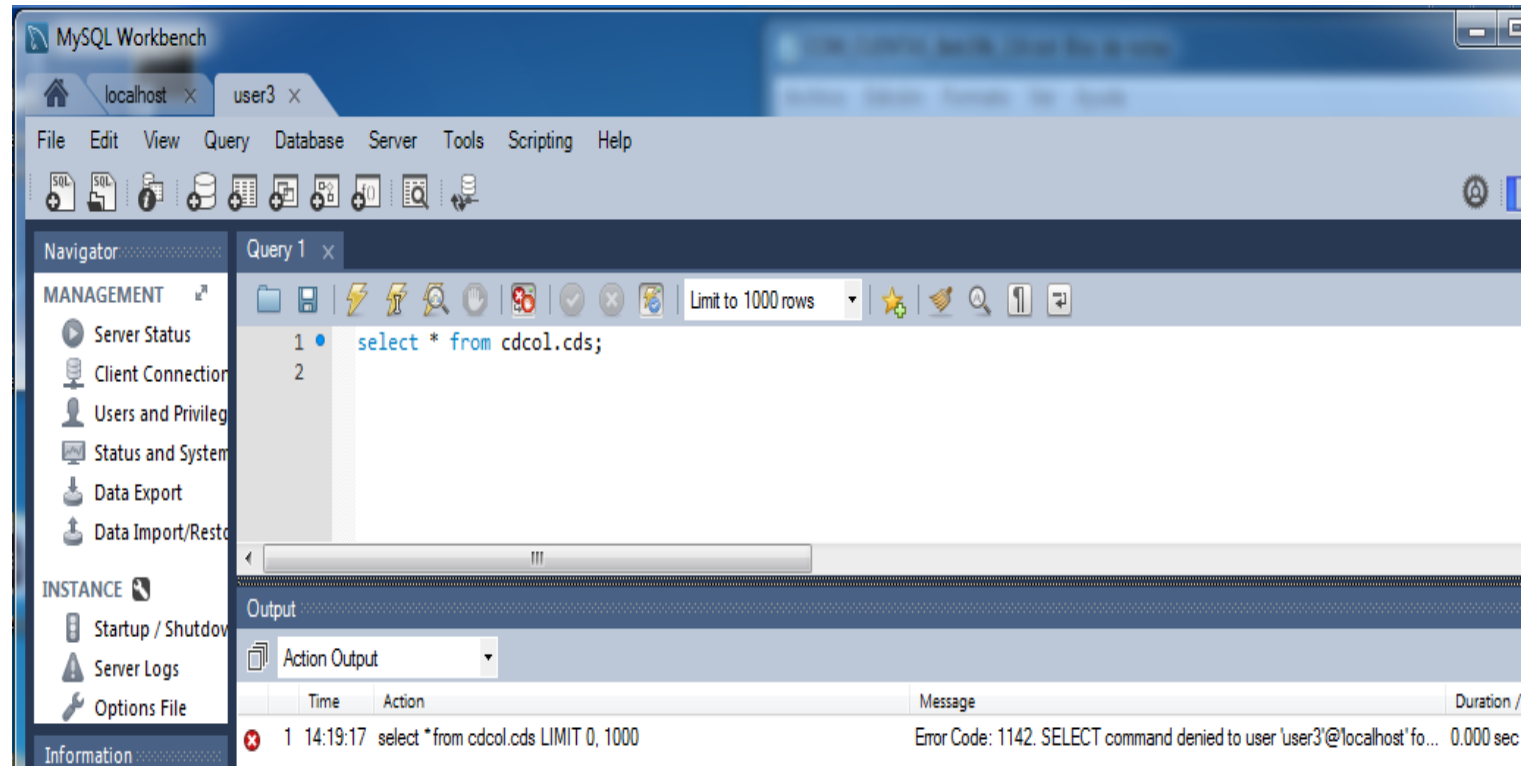
The screenshot shows the phpMyAdmin interface. The left sidebar displays a tree view of databases, with 'mysql (23)' selected. The main panel shows the 'Table: tables_priv' structure. A message at the top indicates that the query returned an empty result set. The SQL query entered is: `SELECT * FROM 'tables_priv' LIMIT 0, 30`. Below the query, a table lists the columns of the 'tables_priv' table.

	Campo	Tipo	Cotejamiento	Atributos
<input type="checkbox"/>	<u>Host</u>	char(60)	utf8_bin	
<input type="checkbox"/>	<u>Db</u>	char(64)	utf8_bin	
<input type="checkbox"/>	<u>User</u>	char(16)	utf8_bin	
<input type="checkbox"/>	<u>Table_name</u>	char(64)	utf8_bin	
<input type="checkbox"/>	Grantor	char(77)	utf8_bin	
<input type="checkbox"/>	Timestamp	timestamp		on update CURRENT_TIME
<input type="checkbox"/>	Table_priv	set (<code>'Select'</code> , <code>'Insert'</code> , <code>'Update'</code> , <code>'Delete'</code> , <code>'Create'</code> , <code>'Drop'</code> , <code>'Grant'</code> , <code>'References'</code> , <code>'Index'</code> , <code>'Alter'</code> , <code>'Create View'</code> , <code>'Show view'</code> , <code>'Trigger'</code>)	utf8_general_ci	
<input type="checkbox"/>	Column_priv	set(<code>'Select'</code> , <code>'Insert'</code> , <code>'Update'</code> , <code>'References'</code>)	utf8_general_ci	

At the bottom of the table, there is a link: [Marcar todos/as / Desmarcar todos](#) Para los elementos que están marcados: [checkbox] [pencil] [X] [key] [lock] [refresh] [print]

Privilegios Nivel de Tabla (VII)

SELECT * from cdcol.cds;





Privilegios Nivel de Columna (I)

- Los permisos de columna se aplican a columnas en una tabla dada
- Estos permisos se almacenan en las tablas "mysql.columns_priv" y "mysql.tables_priv"
- Usando REVOKE, debe especificar las mismas columnas que se otorgaron los permisos

```
GRANT INSERT(titel,interpret) on cdcol.cds to user4@'localhost' identified by 'user4';
```

```
REVOKE INSERT(titel,interpret) on cdcol.cds FROM user4@'localhost';
```

Privilegios Nivel de Columna (II)

GRANT INSERT(titel,interpret) on cdcol.cds to user4@'localhost' identified by 'user4';
SHOW GRANTS FOR user4@localhost;

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with 'MANAGEMENT' and 'INSTANCE' sections. The 'Query' tab is active, showing two queries: 1. `GRANT INSERT(titel,interpret) on cdcol.cds to user4@'localhost' identified by 'user4';` and 2. `SHOW GRANTS FOR user4@localhost;`. The 'Result Grid' pane at the bottom displays the output of the second query, showing the grants for user4@localhost. The grants are: `GRANT USAGE ON *.* TO 'user4'@'localhost' IDENTIFIED BY PASSWORD '*9246DFDBF8341B128B1B132A4626D3AFFEF03F0C'` and `GRANT INSERT (interpret, titel) ON `cdcol`.`cds` TO 'user4'@'localhost'`.

Grants for user4@localhost
GRANT USAGE ON *.* TO 'user4'@'localhost' IDENTIFIED BY PASSWORD '*9246DFDBF8341B128B1B132A4626D3AFFEF03F0C'
GRANT INSERT (interpret, titel) ON `cdcol`.`cds` TO 'user4'@'localhost'

Privilegios Nivel de Columna (III)

The screenshot shows the phpMyAdmin interface. The left sidebar lists databases, with 'mysql (23)' selected. The main panel displays the 'columns_priv' table structure. The SQL query editor shows a query to select all records from 'columns_priv'. The results table shows two records for the 'cds' table, both with 'Insert' privileges.

Mostrando registros 0 - 1 (2 total, La consulta tardó 0.0002 seg)

```
SELECT *
FROM `columns_priv`
LIMIT 0 , 30
```

Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas
Organizar según la clave: Ninguna

+ Opciones

	Host	Db	User	Table_name	Column_name	Timestamp	Column_priv
<input type="checkbox"/>	localhost	cdcol	user4	cds	titel	2019-02-08 15:25:51	Insert
<input type="checkbox"/>	localhost	cdcol	user4	cds	interpret	2019-02-08 15:25:51	Insert

Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas

Operaciones sobre los resultados de la consulta

Vista de impresión Previsualización para imprimir (documento completo) Exportar CREATE VIEW

Privilegios Nivel de Columna (IV)

The screenshot shows the phpMyAdmin interface for a MySQL database. The left sidebar shows the database structure, with 'mysql (23)' selected. The main panel displays the 'tables_priv' table structure. The SQL query editor shows the following query:

```
SELECT *  
FROM `tables_priv`  
LIMIT 0, 30
```

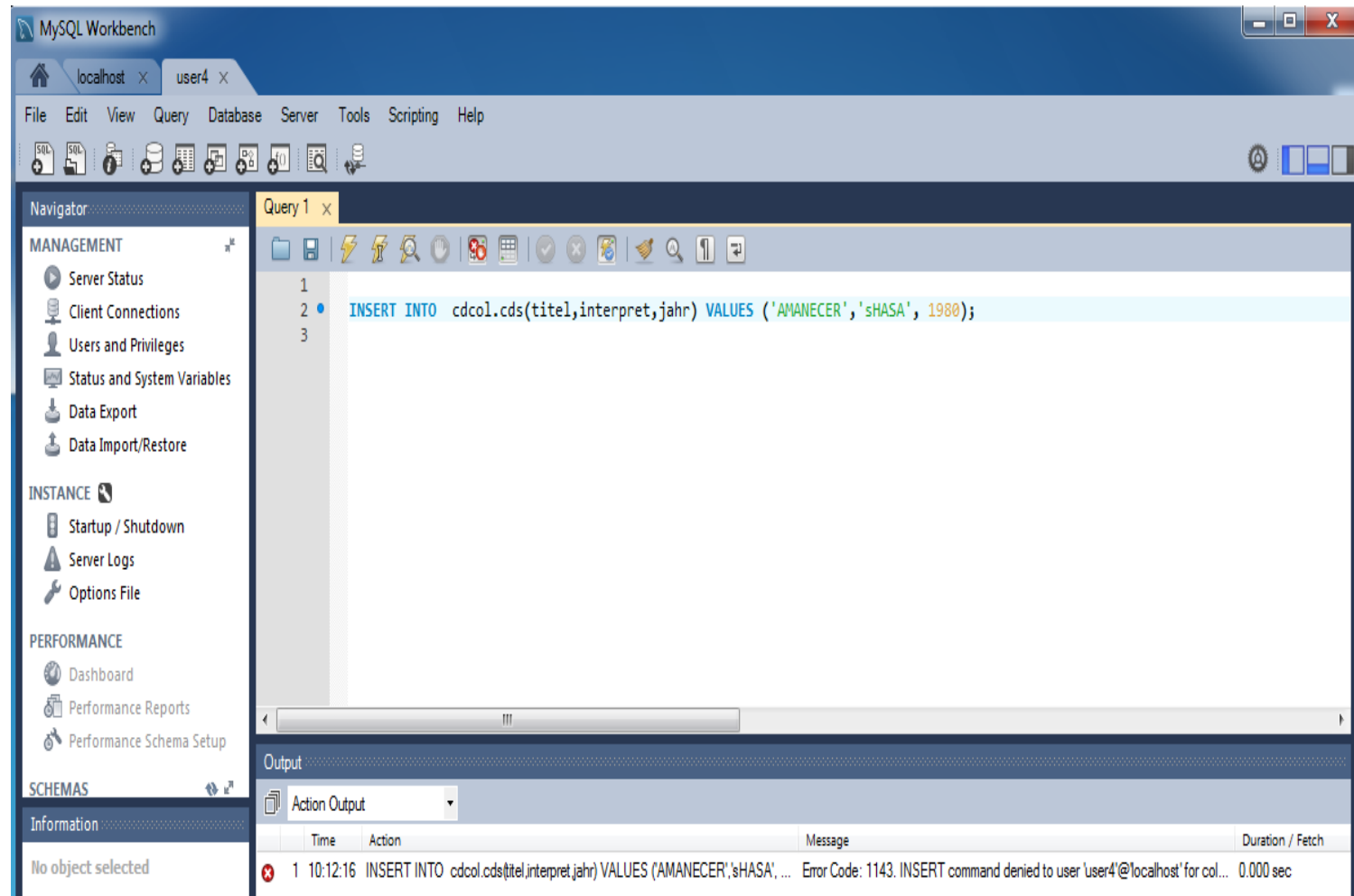
The results section shows the following table structure:

	Host	Db	User	Table_name	Grantor	Timestamp	Table_priv	Column_priv
<input type="checkbox"/>	localhost	cdcol	user4	cds	root@localhost	2019-02-08 15:25:51		Insert

The interface includes various navigation buttons at the top (Examinar, Estructura, SQL, Buscar, Insertar, Exportar, Importar, Operaciones, Vaciar) and a status bar at the bottom (Vista de impresión, Previsualización para imprimir (documento completo), Exportar, CREATE VIEW).

Privilegios Nivel de Columna (V)

INSERT INTO cdcol.cds(titel,interpret,jahr) VALUES ('AMANECER','sHASA', 1980);



Privilegios Nivel de Columna (VI)

INSERT INTO cdcol.cds(titel,interpret) VALUES ('AMANECER','sHASA');

The screenshot shows the MySQL Workbench interface. The left sidebar contains a 'Navigator' panel with categories: MANAGEMENT (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), INSTANCE (Startup / Shutdown, Server Logs, Options File), PERFORMANCE (Dashboard, Performance Reports, Performance Schema Setup), and SCHEMAS. The main area displays 'Query 1' with the SQL statement: `INSERT INTO cdcol.cds(titel,interpret) VALUES ('AMANECER','sHASA');`. The 'Output' panel at the bottom shows a table with columns: Time, Action, Message, and Duration / Fetch. It contains two rows: a failed attempt at 10:12:16 with Error Code 1143, and a successful execution at 10:15:28 showing '1 row(s) affected'.

Time	Action	Message	Duration / Fetch
1 10:12:16	INSERT INTO cdcol.cds(titel,interpret,jahr) VALUES ('AMANECER','sHASA', ...	Error Code: 1143. INSERT command denied to user 'user4'@'localhost' for col...	0.000 sec
2 10:15:28	INSERT INTO cdcol.cds(titel,interpret) VALUES ('AMANECER','sHASA')	1 row(s) affected	0.032 sec

Privilegios Nivel de Columna (VII)

The screenshot displays the MySQL Workbench interface. The 'Query 1' tab shows the SQL query: `SELECT * FROM cdcol.cds;`. The 'Result Grid' shows the following data:

titel	interpret	jahr	id
Beauty	Ryuichi Sakamoto	1990	1
Goodbye Country (Hell...)	Groove Armada	2001	4
Glee	Bran Van 3000	1997	5
AMANE CER	sHASA	NULL	6
NULL	NULL	NULL	NULL

The 'Output' tab shows the 'Action Output' with the following log:

Time	Action	Message	Duration / Fetch
1 09:38:53	GRANT INSERT(titel,interpret) on cdcol.cds to user4@localhost identified by 'us...	0 row(s) affected	0.125 sec
2 09:38:53	SHOW GRANTS FOR user4@localhost	2 row(s) returned	0.000 sec / 0.000 sec
3 10:18:48	SELECT * FROM cdcol.cds LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

The 'Connection' information at the bottom left shows:

- Name: localhost
- Host: 127.0.0.1
- Port: 3306
- Server: Source distribution
- Version: 5.1.37-log
- Login User: root
- Current User: root@%

Privilegios Nivel de Columna (VIII)

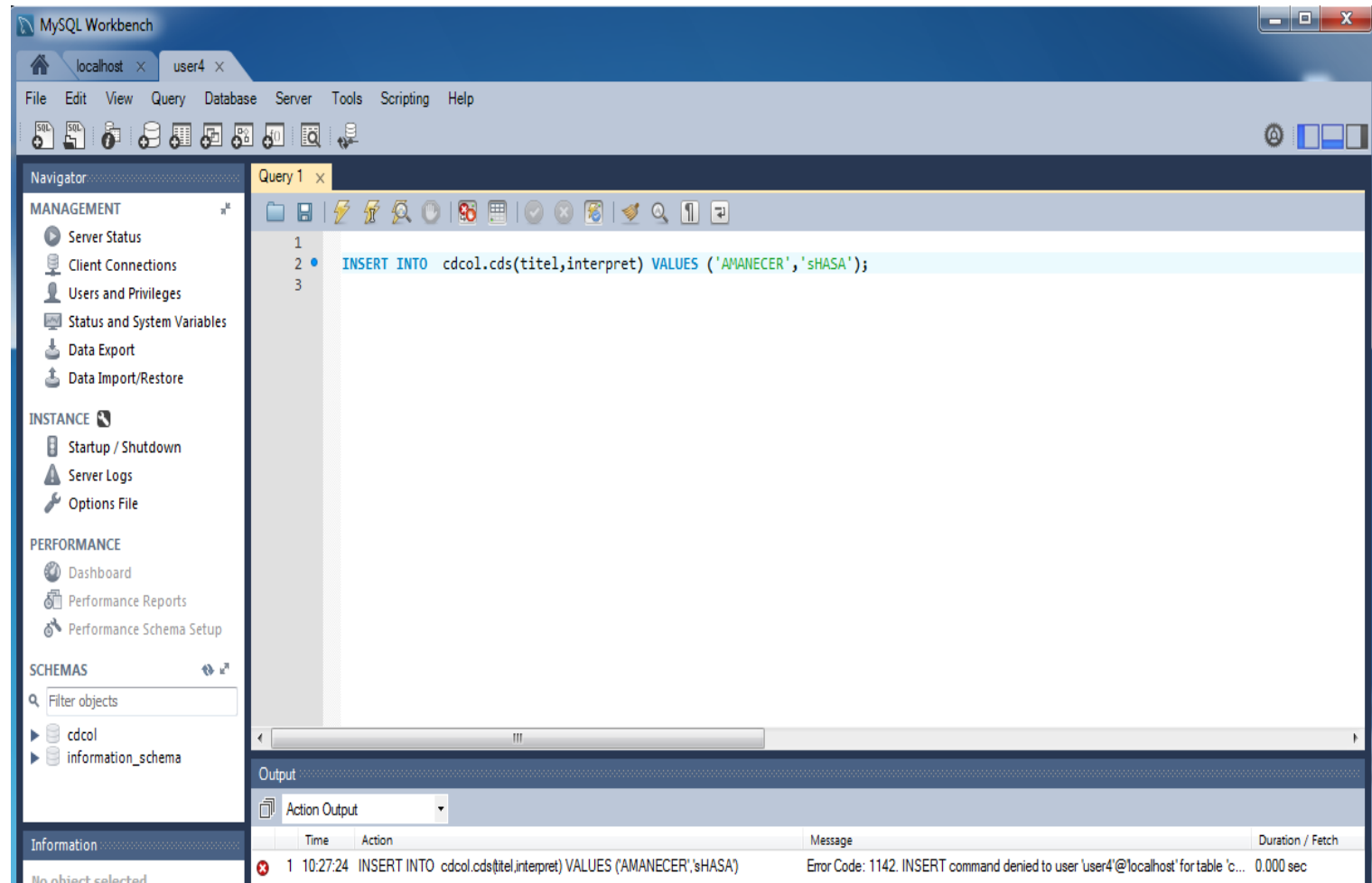
```
REVOKE INSERT(titel,interpret) on cdcol.cds FROM user4@'localhost';  
SHOW GRANTS FOR user4@localhost;
```

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with 'MANAGEMENT' and 'INSTANCE' sections. The 'Query' tab is active, showing two queries: 'Query 2' and 'Query 1'. The 'Query 2' tab is selected, displaying the SQL commands: 'REVOKE INSERT(titel,interpret) on cdcol.cds FROM user4@'localhost';' and 'SHOW GRANTS FOR user4@localhost;'. The 'Result Grid' at the bottom shows the output of the second query, which is the list of grants for user4@localhost. The grants are listed as 'GRANT USAGE ON *,* TO 'user4'@'localhost' IDENTIFIED BY PASSWORD '*9246DFDBF8341B128B1B132A4626D3AFFEF03F0C''.

Grants for user4@localhost
GRANT USAGE ON *,* TO 'user4'@'localhost' IDENTIFIED BY PASSWORD '*9246DFDBF8341B128B1B132A4626D3AFFEF03F0C'

Privilegios Nivel de Columna (IX)

INSERT INTO cdcol.cds(titel,interpret) VALUES ('AMANECER','sHASA');





Privilegios Nivel de Rutina (I)

```
DROP SCHEMA IF EXISTS TablasFecha3;  
CREATE SCHEMA TablasFecha3;  
USE TablasFecha3;
```

```
create table Cliente(  
    Dni VARCHAR(10),  
    Nombre VARCHAR(10),  
    Apellido VARCHAR(10),  
    PRIMARY KEY (Dni)  
)ENGINE=InnoDB;
```

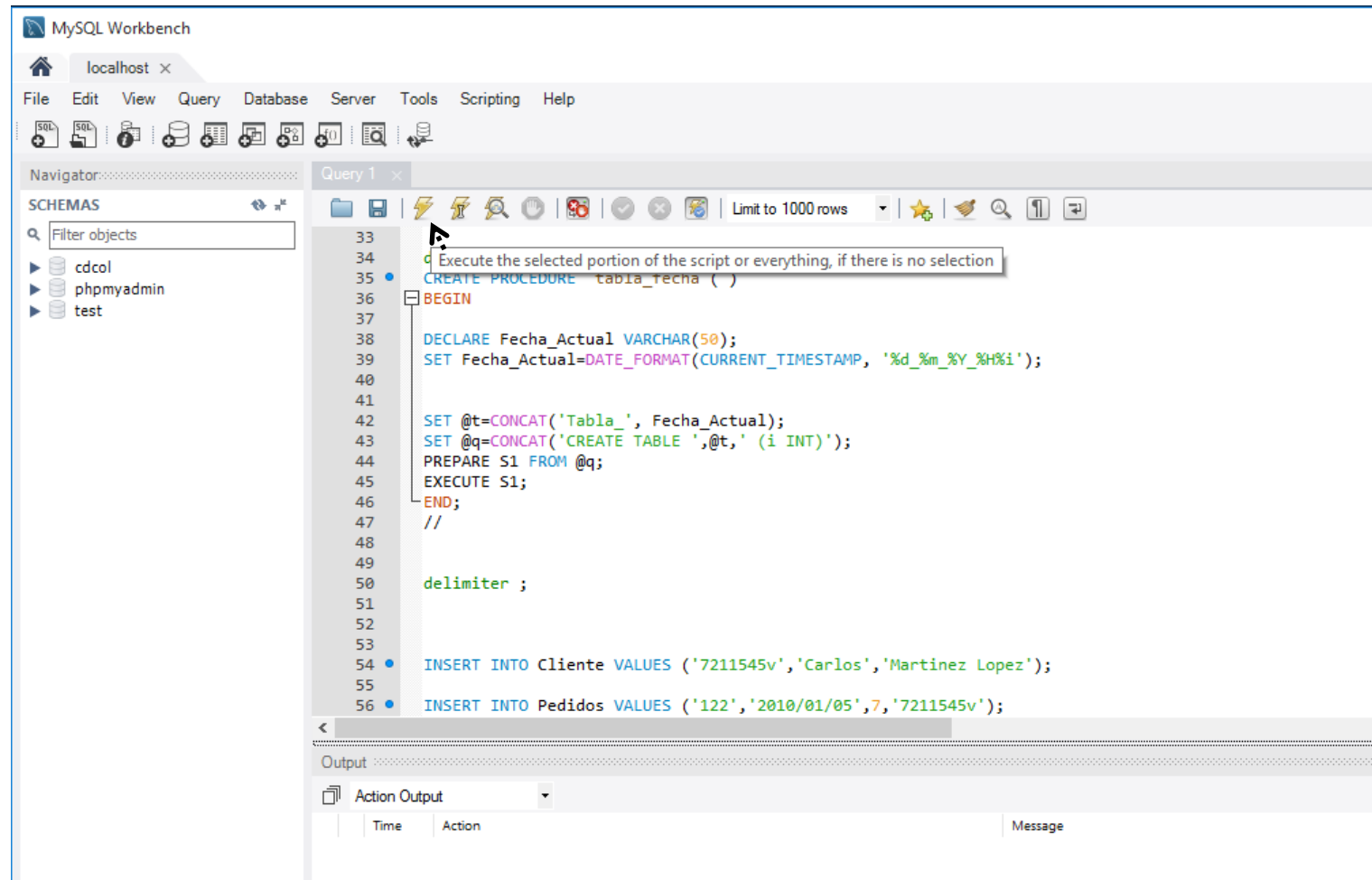
```
create table Pedidos(  
    npedido INTEGER,  
    fecha DATE,  
    Cantidad DOUBLE,  
    cliente_Dni VARCHAR(10),  
    PRIMARY KEY (npedido),  
    FOREIGN KEY (cliente_Dni) REFERENCES Cliente(Dni)  
)ENGINE=InnoDB;
```



Privilegios Nivel de Rutina (II)

```
delimiter //  
CREATE PROCEDURE `tabla_fecha`( )  
BEGIN  
  
DECLARE Fecha_Actual VARCHAR(50);  
SET Fecha_Actual=DATE_FORMAT(CURRENT_TIMESTAMP, '%d_%m_%Y_%H%i');  
  
SET @t=CONCAT('Tabla_', Fecha_Actual);  
SET @q=CONCAT('CREATE TABLE ',@t,' (i INT)');  
PREPARE S1 FROM @q;  
EXECUTE S1;  
END;  
//  
  
delimiter ;  
  
INSERT INTO Cliente VALUES ('7211545v','Carlos','Martinez Lopez');  
  
INSERT INTO Pedidos VALUES ('122','2010/01/05',7,'7211545v');
```

Privilegios Nivel de Rutina (III)



The screenshot shows the MySQL Workbench interface. On the left, the 'Navigator' pane displays the 'SCHEMAS' section with a search filter 'Filter objects'. Below it, three schemas are listed: 'cdcol', 'phpmyadmin', and 'test'. The main editor area, titled 'Query 1', contains a SQL script. A tooltip is visible over the 'Execute' button (a lightning bolt icon) in the toolbar, stating: 'Execute the selected portion of the script or everything, if there is no selection'. The script is as follows:

```
33
34
35 • CREATE PROCEDURE tabla_fecha ( )
36 BEGIN
37
38 DECLARE Fecha_Actual VARCHAR(50);
39 SET Fecha_Actual=DATE_FORMAT(CURRENT_TIMESTAMP, '%d_%m_%Y_%H%i');
40
41
42 SET @t=CONCAT('Tabla_', Fecha_Actual);
43 SET @q=CONCAT('CREATE TABLE ',@t, ' (i INT)');
44 PREPARE S1 FROM @q;
45 EXECUTE S1;
46 END;
47 //
48
49
50 delimiter ;
51
52
53
54 • INSERT INTO Cliente VALUES ('7211545v','Carlos','Martinez Lopez');
55
56 • INSERT INTO Pedidos VALUES ('122','2010/01/05',7,'7211545v');
```

At the bottom of the interface, there is an 'Output' pane with a dropdown menu set to 'Action Output'. Below this, there are columns for 'Time', 'Action', and 'Message'.

Privilegios Nivel de Rutina (IV)

SHOW PROCEDURE STATUS like 'tabla_fecha';

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'tablasfecha3' selected. The main query editor contains the query: `SHOW PROCEDURE STATUS like 'tabla_fecha';`. The 'Result Grid' shows the following data:

	Db	Name	Type	Definer	Modified	Created	Security_type	Comment	character_set_client	collation_connection
▶	tablasfecha3	tabla_fecha	PROCEDURE	root@%	2020-02-04 12:24:09	2020-02-04 12:24:09	DEFINER		utf8	utf8_general_ci

Below the result grid, the 'Output' tab is active, showing the 'Action Output' table:

	Time	Action	Message	Duration / Fetch
✓	1 12:25:11	SHOW PROCEDURE STATUS like 'tabla_fecha'	1 row(s) returned	0.031 sec / 0.000 sec

Privilegios Nivel de Rutina (V)

CALL TablasFecha3.tabla_fecha();

The screenshot shows the MySQL Workbench interface. On the left, the 'Navigator' pane displays the 'cds' database schema, including tables like 'cliente', 'pedidos', and 'tabla_fecha'. The main editor window shows a query titled 'Query 1' with the command: `call TablasFecha3.tabla_fecha();`. Below the editor, the 'Output' pane shows the 'Action Output' table, which contains two rows of execution logs.

	Time	Action	Message	Duration / Fetch
✓	1 12:25:11	SHOW PROCEDURE STATUS like 'tabla_fecha'	1 row(s) returned	0.031 sec / 0.000 sec
✓	2 12:27:26	call TablasFecha3.tabla_fecha()	0 row(s) affected	0.031 sec



Privilegios Nivel de Rutina (VI)

comando "CREATE USER"

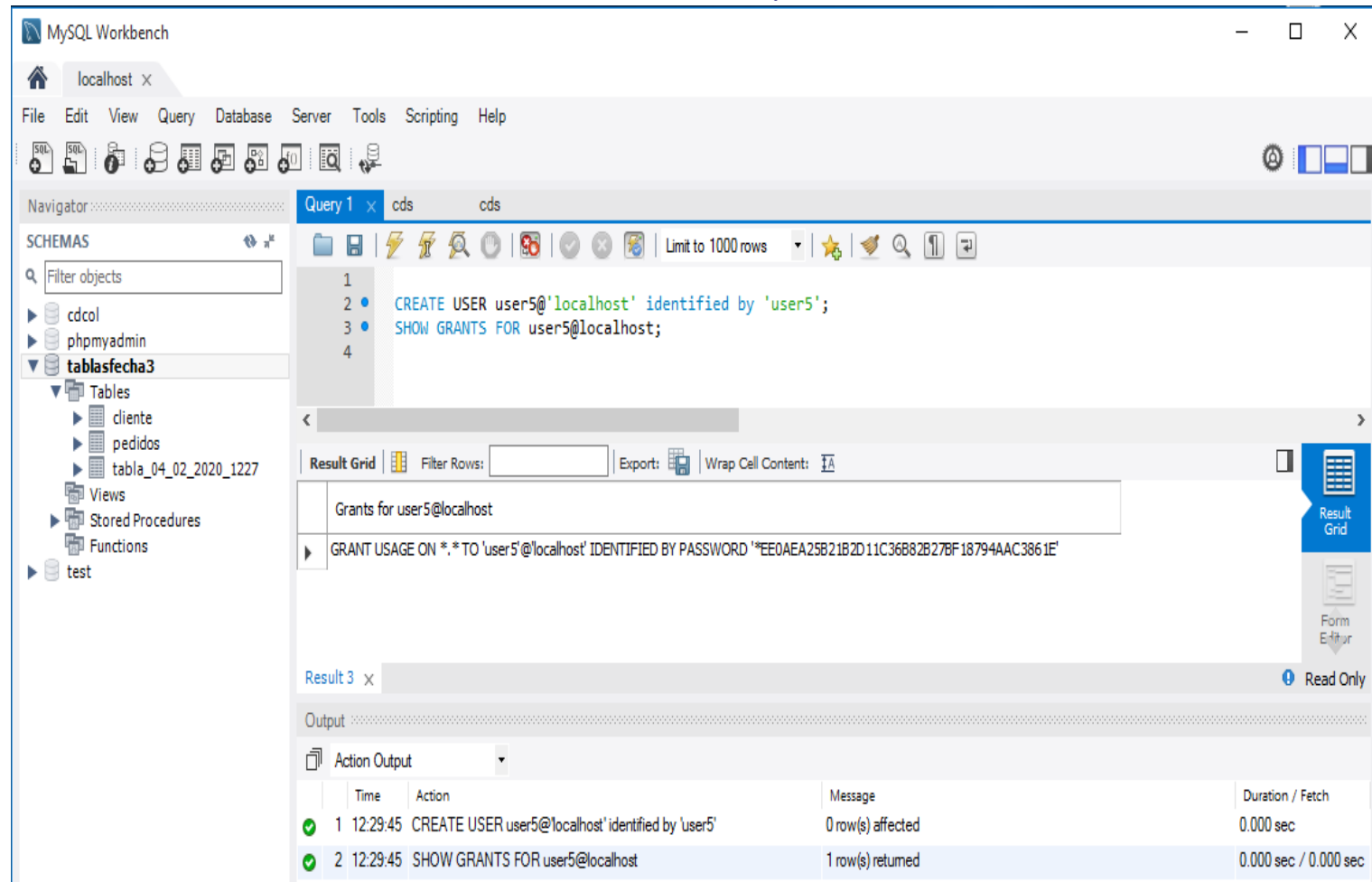
CREATE USER

user [auth_option] [, user [auth_option]] ...

auth_option: {
IDENTIFIED BY 'auth_string'
| IDENTIFIED BY PASSWORD 'hash_string'
| IDENTIFIED WITH auth_plugin
| IDENTIFIED WITH auth_plugin AS 'hash_string'
}

Privilegios Nivel de Rutina (VII)

CREATE USER 'user5'@'localhost' identified by 'user5';
SHOW GRANTS FOR 'user5'@'localhost';



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'tablasfecha3' selected. The main editor shows a query window with the following SQL commands:

```
1  
2 • CREATE USER user5@'localhost' identified by 'user5';  
3 • SHOW GRANTS FOR user5@localhost;  
4
```

The 'Result Grid' shows the output of the second command:

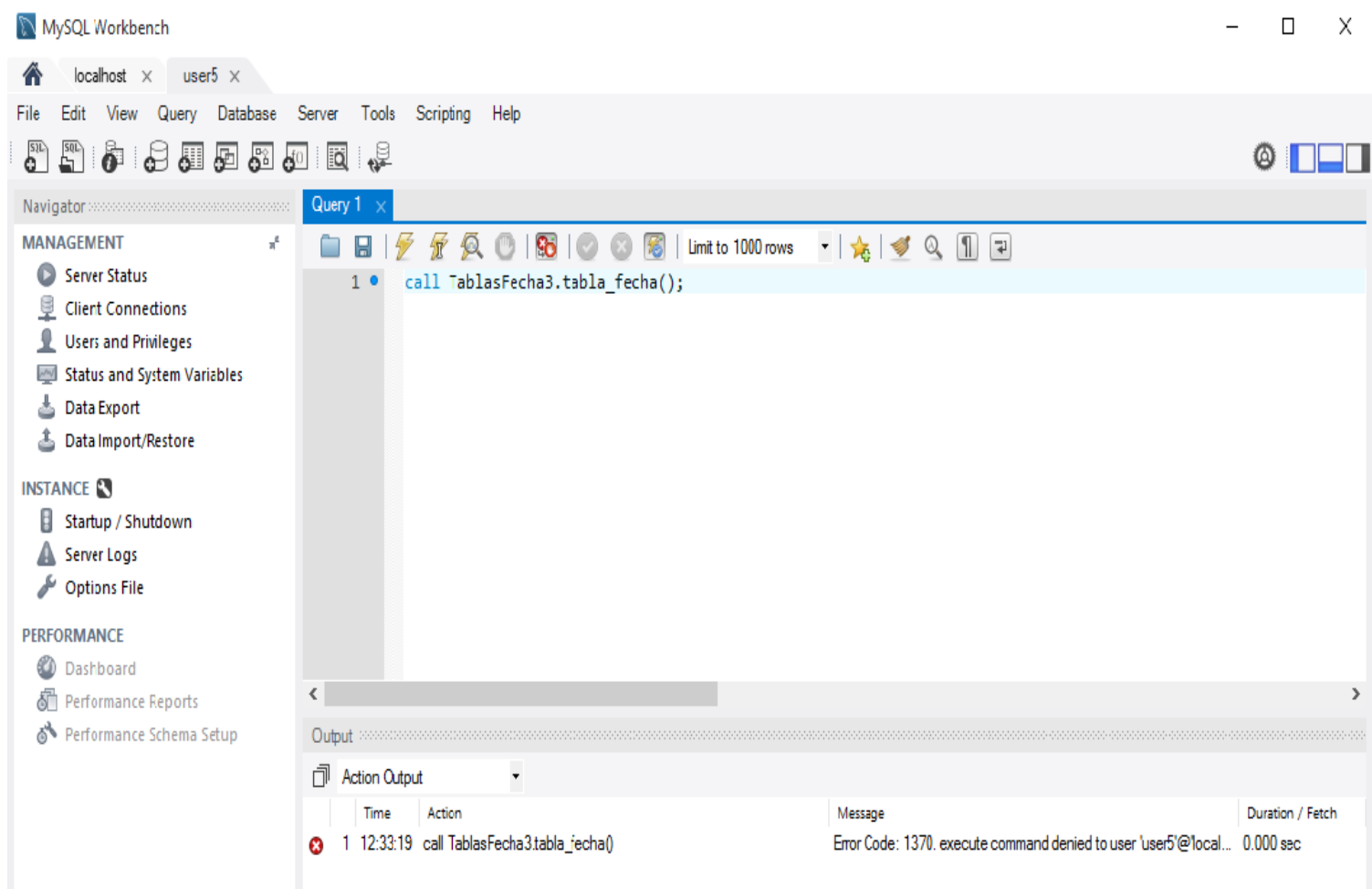
Grants for user5@localhost	
▶	GRANT USAGE ON *.* TO 'user5'@'localhost' IDENTIFIED BY PASSWORD '*EE0AEA25B21B2D11C36B82B27BF18794AAC3861E'

The 'Output' tab at the bottom shows the execution log:

	Time	Action	Message	Duration / Fetch
✓	1 12:29:45	CREATE USER user5@localhost identified by 'user5'	0 row(s) affected	0.000 sec
✓	2 12:29:45	SHOW GRANTS FOR user5@localhost	1 row(s) returned	0.000 sec / 0.000 sec

Privilegios Nivel de Rutina (VIII)

CALL TablasFecha3.tabla_fecha();



The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The main editor area shows a query named 'Query 1' with the text `call TablasFecha3.tabla_fecha();`. Below the editor, the 'Output' pane is visible, showing an 'Action Output' table with one row indicating an error.

	Time	Action	Message	Duration / Fetch
✖	1 12:33:19	call TablasFecha3.tabla_fecha()	Error Code: 1370. execute command denied to user 'user5'@local...	0.000 sec

Privilegios Nivel de Rutina (IX)

GRANT EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha TO 'user5'@'localhost';
SHOW GRANTS FOR 'user5'@'localhost';

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'tablasfecha3' expanded, showing tables like 'cliente', 'pedidos', and 'tabla_04_02_2020_1227'. The main query editor contains the following SQL commands:

```
1  
2 GRANT EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha TO user5@'localhost';  
3 SHOW GRANTS FOR user5@localhost;  
4
```

The 'Result Grid' shows the output of the second command, displaying the grants for user5@localhost:

Grants for user5@localhost	
▶	GRANT USAGE ON *.* TO 'user5'@'localhost' IDENTIFIED BY PASSWORD '*EE0AEA25B21B2D11C36B82B27BF18794AAC3861E'
	GRANT EXECUTE ON PROCEDURE `tablasfecha3`.`tabla_fecha` TO 'user5'@'localhost'

The 'Output' pane at the bottom shows the execution log:

	Time	Action	Message	Duration / Fetch
✓	1 12:35:10	GRANT EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha...	0 row(s) affected	0.000 sec
✓	2 12:35:10	SHOW GRANTS FOR user5@localhost	2 row(s) returned	0.000 sec / 0.000 sec

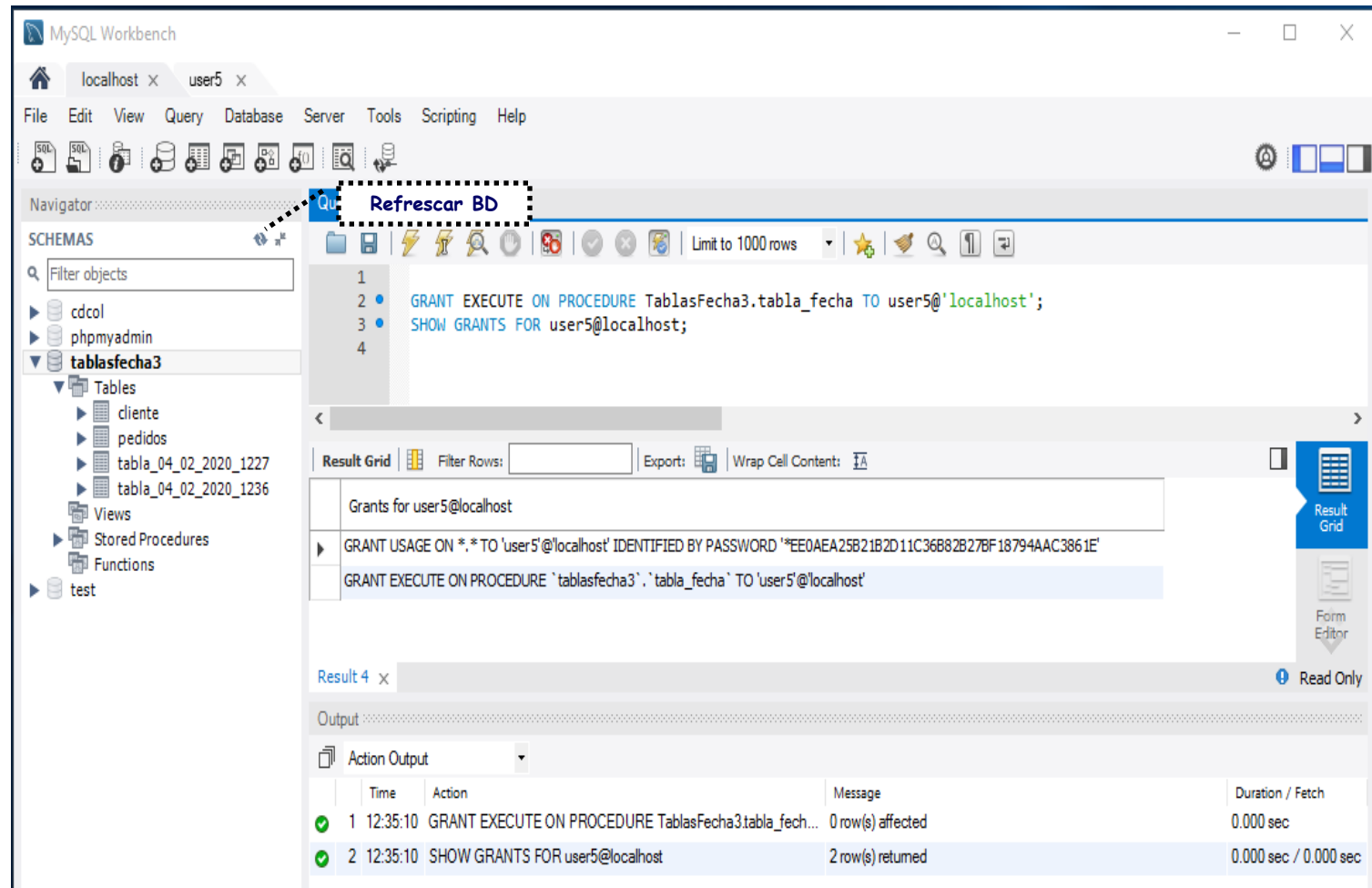
Privilegios Nivel de Rutina (X)

CALL TablasFecha3.tabla_fecha();

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with sections for 'MANAGEMENT' (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), 'INSTANCE' (Startup / Shutdown, Server Logs, Options File), and 'PERFORMANCE' (Dashboard, Performance Reports, Performance Schema Setup). The main editor area shows a query window with the text `call TablasFecha3.tabla_fecha();`. Below the editor is the 'Output' pane, which is set to 'Action Output'. It displays a table with the following data:

	Time	Action	Message	Duration / Fetch
✖	1 12:33:19	call TablasFecha3.tabla_fecha()	Error Code: 1370. execute command denied to user 'user5'@local...	0.000 sec
✔	2 12:36:25	call TablasFecha3.tabla_fecha()	0 row(s) affected	0.015 sec

Privilegios Nivel de Rutina (XI)



The screenshot shows the MySQL Workbench interface. The 'Navigator' pane on the left displays the database structure, including the 'tablasfecha3' database and its tables. The 'Query' editor in the center contains the following SQL commands:

```
1 GRANT EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha TO user5@'localhost';
2
3 SHOW GRANTS FOR user5@localhost;
4
```

The 'Result Grid' pane on the right shows the output of the second command, 'SHOW GRANTS FOR user5@localhost'. The results are as follows:

Grants for user5@localhost	
GRANT USAGE ON *	* TO 'user5'@'localhost' IDENTIFIED BY PASSWORD '*EE0AEA25B21B2D11C36B82B27BF18794AAC3861E'
GRANT EXECUTE ON PROCEDURE	'tablasfecha3'. 'tabla_fecha' TO 'user5'@'localhost'

The 'Output' pane at the bottom shows the execution log:

	Time	Action	Message	Duration / Fetch
✓	1 12:35:10	GRANT EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha...	0 row(s) affected	0.000 sec
✓	2 12:35:10	SHOW GRANTS FOR user5@localhost	2 row(s) returned	0.000 sec / 0.000 sec

Privilegios Nivel de Rutina (XII)

http://localhost/phpmyadmin/index.php?dt localhost / localhost / mys... x

phpMyAdmin

Base de datos
mysql (23)

mysql (23)

- columns_priv
- db
- event
- func
- general_log
- help_category
- help_keyword
- help_relation
- help_topic
- host
- ndb_binlog_index
- plugin
- proc
- procs_priv
- servers
- slow_log
- tables_priv
- time_zone
- time_zone_leap_second
- time_zone_name
- time_zone_transition
- time_zone_transition_type
- user

Servidor: localhost Base de datos: mysql Tabla: procs_priv "Procedure privileges"

Examinar Estructura SQL Buscar Insertar Exportar Importar Operaciones Vaciar Eliminar



Mostrando registros 0 - 0 (1 total, La consulta tardó 0.0003 seg)




```
SELECT *  
FROM `procs_priv`  
LIMIT 0 , 30
```

☐ Perfil/Perfilamiento [Editar] [Explicar el SQL] [Crear código F

Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas





+ Opciones

	Host	Db	User	Routine_name	Routine_type	Grantor	Proc_priv	Timestamp
<input type="checkbox"/>  	localhost	tablasfecha3	user5	tabla_fecha	PROCEDURE	root@localhost	Execute	2020-02-04 12:35:10

↑ Marcar todos/as / Desmarcar todos Para los elementos que están marcados:   

Mostrar : 30 filas empezando de 0
en modo horizontal y repetir los encabezados cada 100 celdas

Operaciones sobre los resultados de la consulta

 Vista de impresión  Previsualización para imprimir (documento completo)  Exportar  CREATE VIEW

Privilegios Nivel de Rutina (XIII)

REVOKE EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha FROM user5@'localhost';
SHOW GRANTS FOR user5@localhost;

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with sections for 'MANAGEMENT' (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), 'INSTANCE' (Startup / Shutdown, Server Logs, Options File), and 'PERFORMANCE' (Dashboard, Performance Reports, Performance Schema Setup). The 'Schema: tablasfecha3' is selected at the bottom. The main editor area shows 'Query 2' with the following SQL commands:

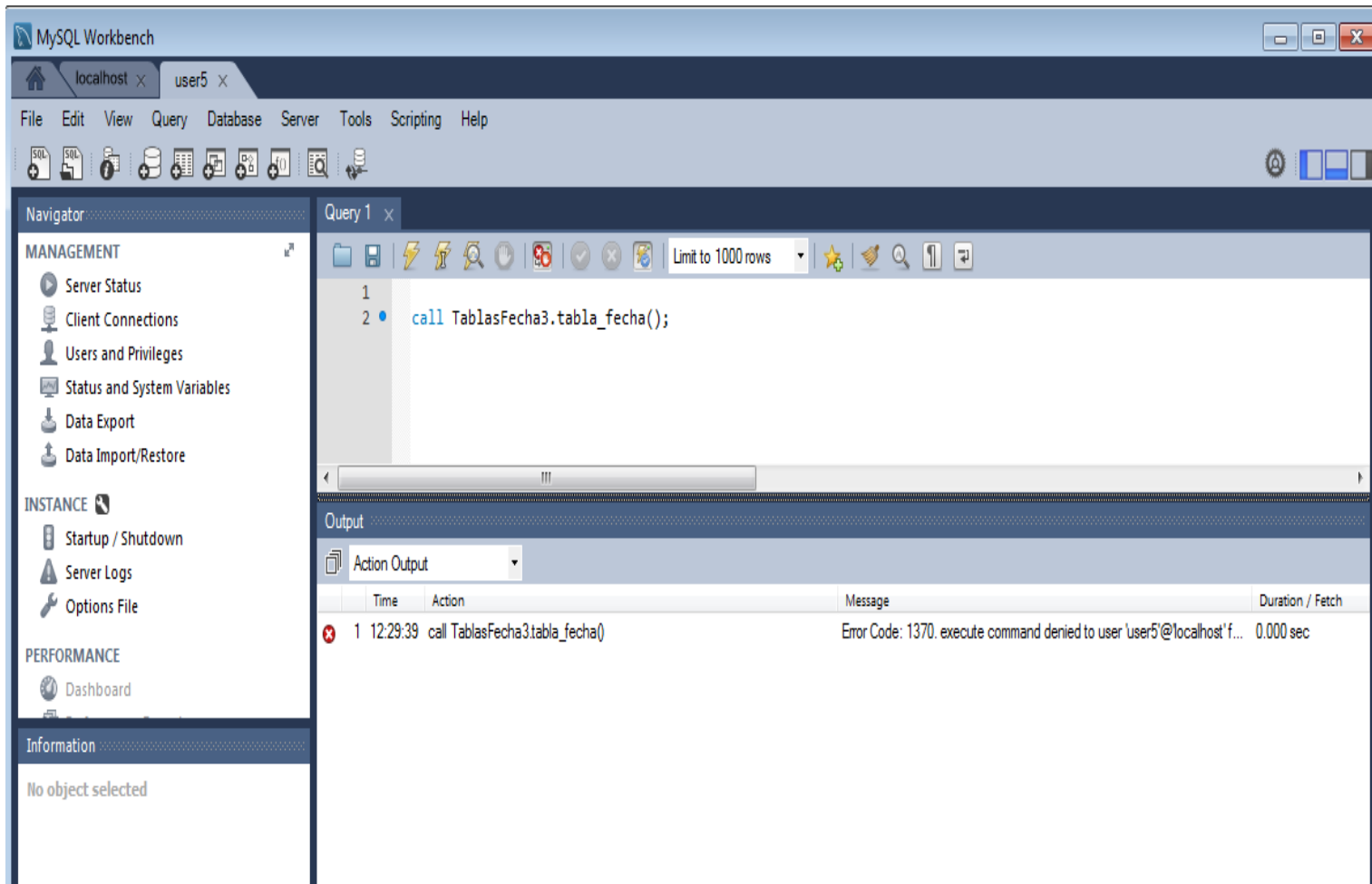
```
1 • REVOKE EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha FROM user5@'localhost';
2 • SHOW GRANTS FOR user5@localhost;
```

The 'Result Grid' at the bottom displays the output of the second command, showing the grants for user5@localhost:

Grants for user5@localhost
GRANT USAGE ON *,* TO 'user5'@'localhost' IDENTIFIED BY PASSWORD '*EE0AEA25B21B2D11C36B82B27BF18794AAC38...

Privilegios Nivel de Rutina (XIV)

REVOKE EXECUTE ON PROCEDURE TablasFecha3.tabla_fecha FROM user5@'localhost';
SHOW GRANTS FOR user5@localhost;



The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying a SQL query: `call TablasFecha3.tabla_fecha();`. The 'Output' pane at the bottom shows an error message: 'Error Code: 1370. execute command denied to user 'user5'@'localhost' f... 0.000 sec'. The 'Navigator' pane on the left shows the 'MANAGEMENT' section with options like 'Server Status', 'Client Connections', 'Users and Privileges', 'Status and System Variables', 'Data Export', and 'Data Import/Restore'. The 'INSTANCE' section shows 'Startup / Shutdown', 'Server Logs', and 'Options File'. The 'PERFORMANCE' section shows 'Dashboard'. The 'Information' pane at the bottom shows 'No object selected'.

	Time	Action	Message	Duration / Fetch
✖	1 12:29:39	call TablasFecha3.tabla_fecha()	Error Code: 1370. execute command denied to user 'user5'@'localhost' f...	0.000 sec

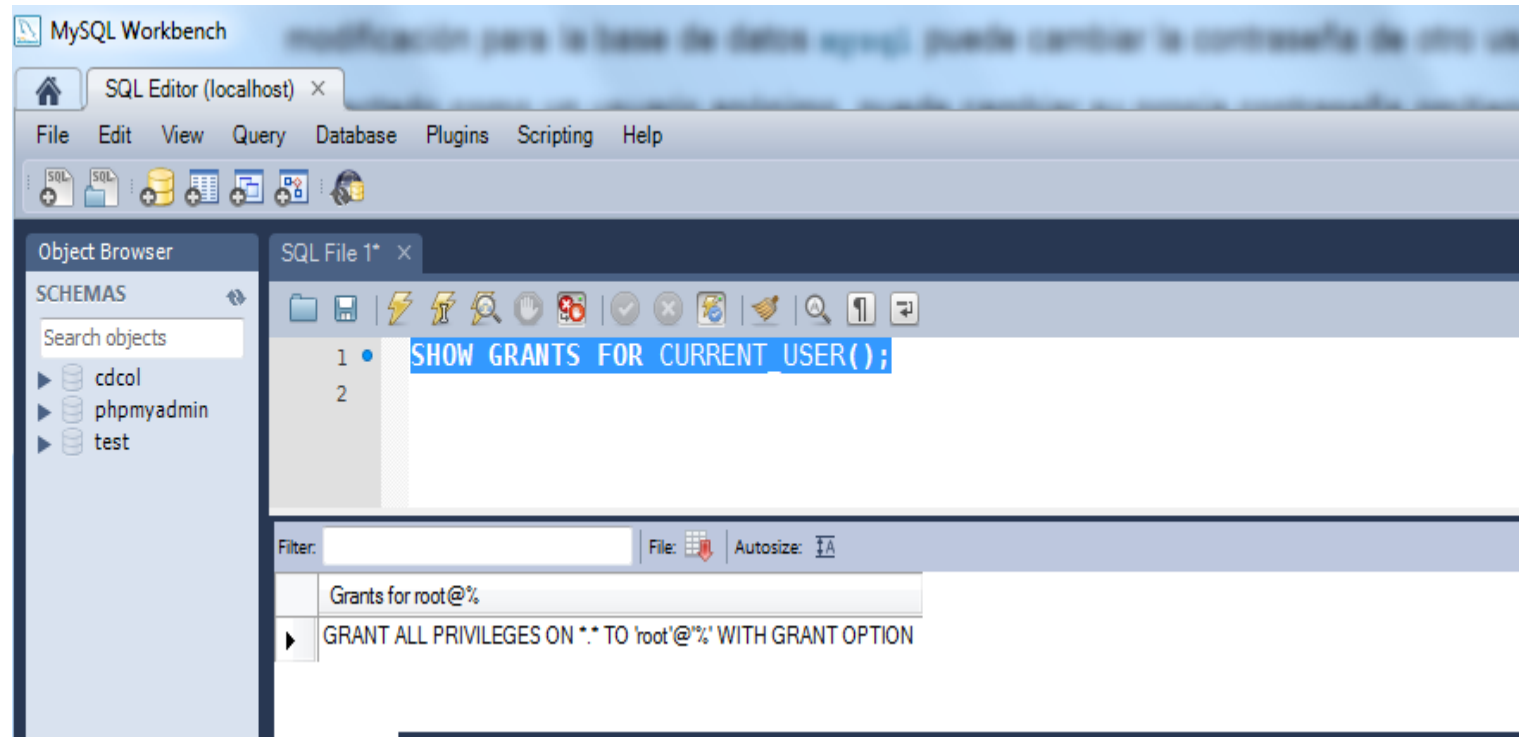


Cambiar Contraseñas de Usuario (I)

- **SET PASSWORD FOR 'user1'@'localhost' = PASSWORD('user11');**
Sólo los usuarios tales como root con acceso de modificación para la base de datos *mysql* puede cambiar la contraseña de otro usuario.
- **GRANT USAGE ON *.* TO 'user1'@'localhost' IDENTIFIED BY 'user12';**
Puede usar el comando **GRANT USAGE** globalmente (**ON *.***) para asignar una contraseña a una cuenta sin afectar los permisos actuales de la cuenta.
- **UPDATE mysql.user SET Password = PASSWORD('user13') WHERE Host = 'localhost' AND User = 'user1'; FLUSH PRIVILEGES;**
Aunque generalmente es preferible asignar contraseñas usando uno de los métodos precedentes, se puede hacer modificando la tabla *mysql.user* directamente.

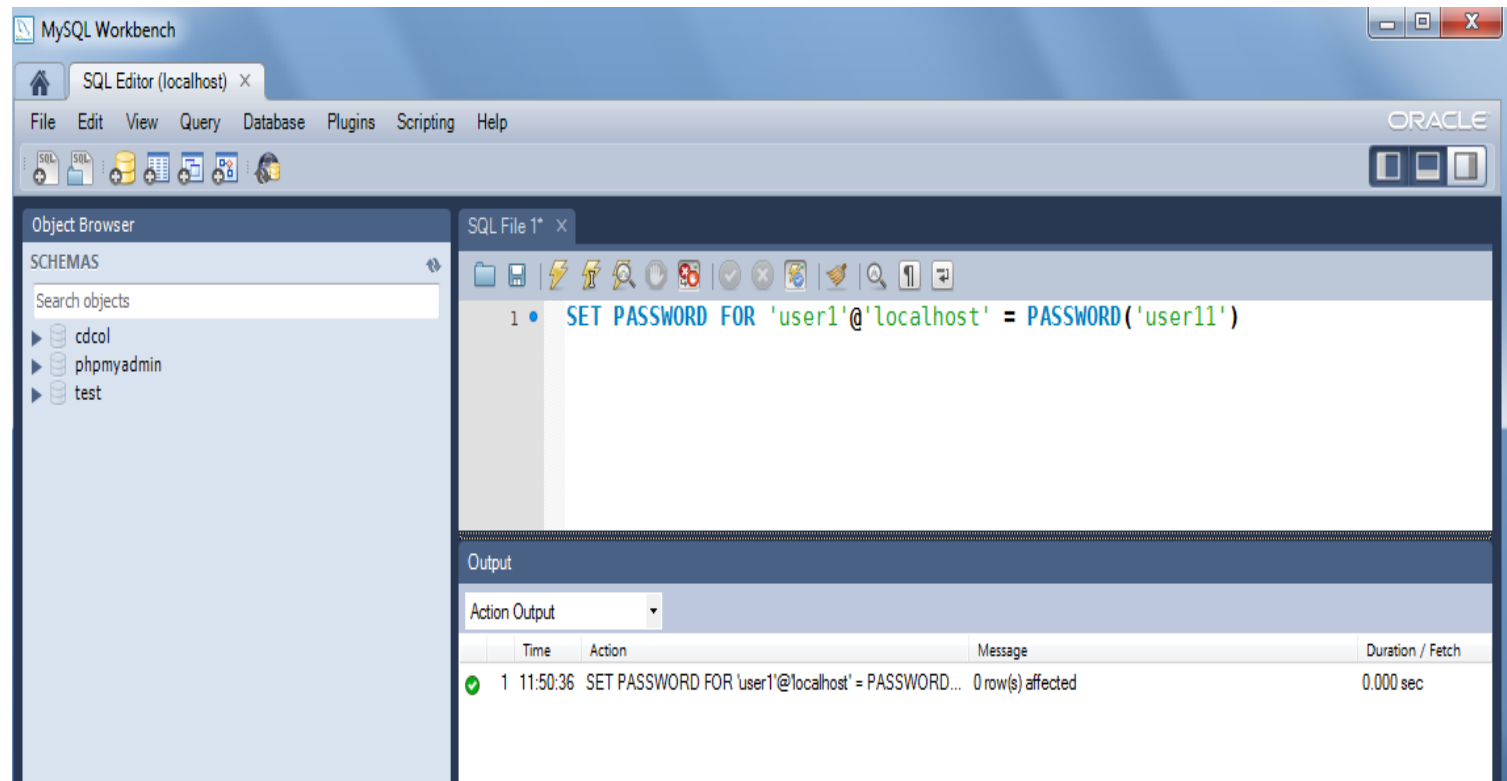
Cambiar Contraseñas de Usuario (II)

SHOW GRANTS FOR CURRENT_USER();



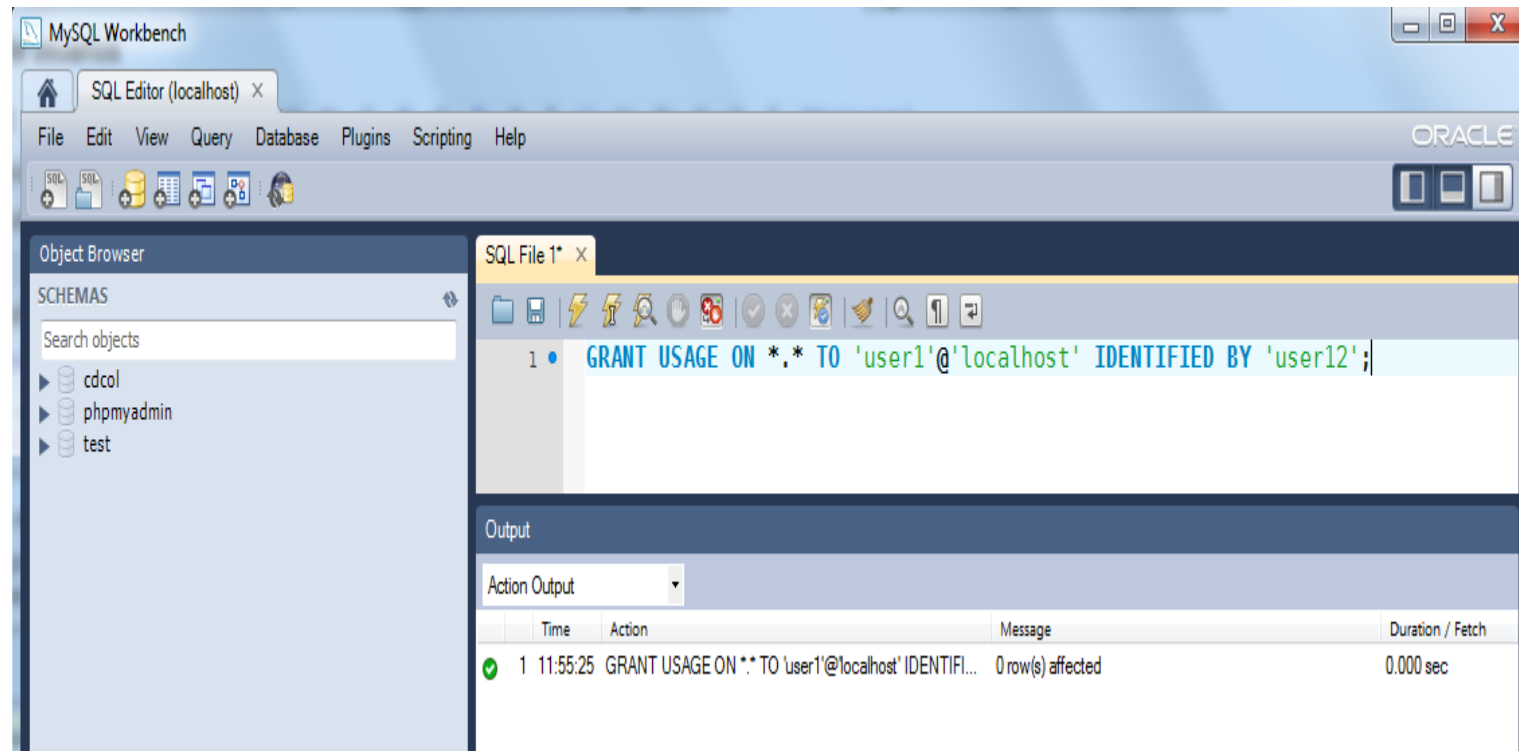
Cambiar Contraseñas de Usuario (III)

SET PASSWORD FOR 'user1'@'localhost' = PASSWORD('user11')



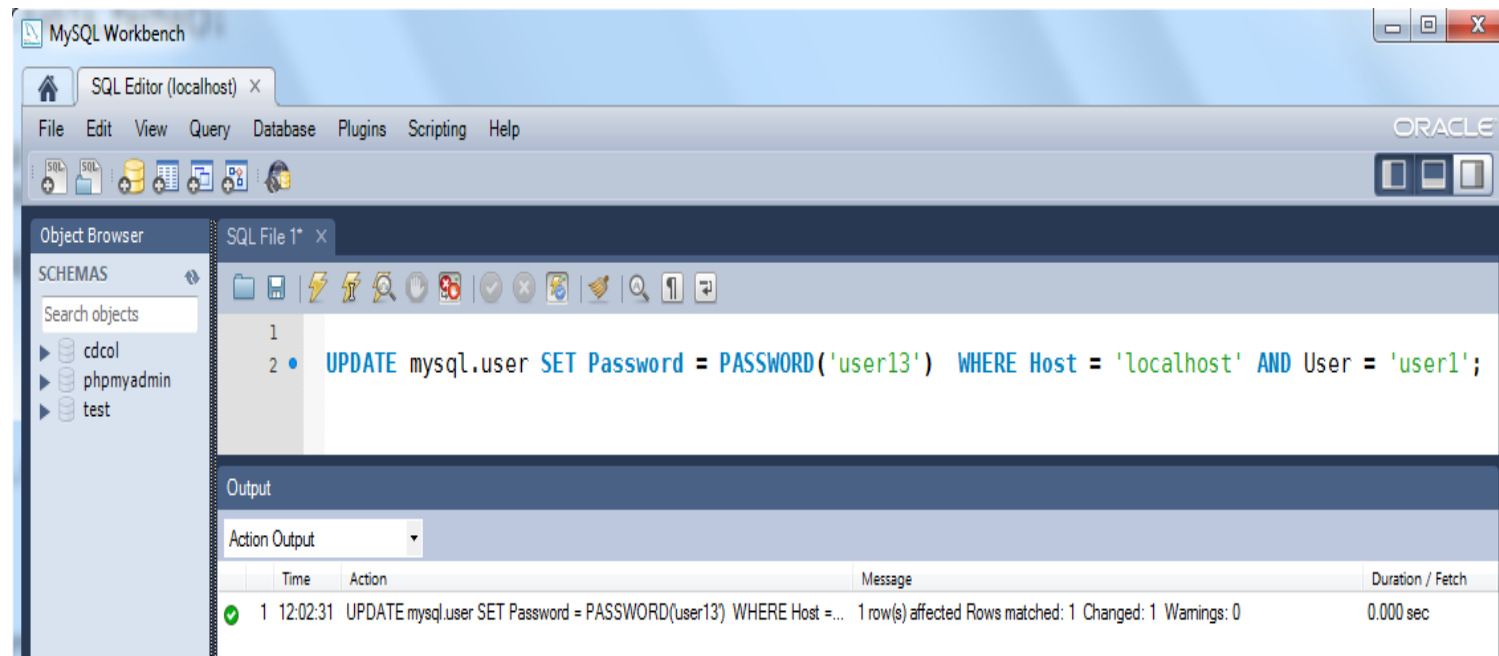
Cambiar Contraseñas de Usuario (IV)

GRANT USAGE ON *.* TO 'user1'@'localhost' IDENTIFIED BY 'user12';



Cambiar Contraseñas de Usuario (V)

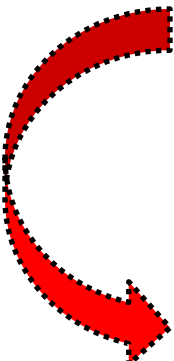
```
UPDATE mysql.user SET Password = PASSWORD('user13') WHERE Host = 'localhost' AND User = 'user1';  
FLUSH PRIVILEGES;
```



GESTIÓN PRIVILEGIOS

MySQL Server 5.* versus 8.*

- En las versiones MySQL Server 8.* el Administrador de la Base de Datos primero ejecuta el comando CREATE USER y luego define con el comando GRANT sus privilegios



```
GRANT all on *.* to user1@'%' identified by 'user1';  
SHOW GRANTS FOR 'user1'@'%';
```


MySQL 5.

```
CREATE USER 'user1'@'%' IDENTIFIED BY 'user1';  
GRANT ALL ON *.* TO 'user1'@'%';  
SHOW GRANTS FOR 'user1'@'%';
```

MySQL 8.

GESTIÓN PRIVILEGIOS

MySQL Server 5.* versus 8.*



```
GRANT ALL PRIVILEGES ON *.* TO 'cliente_ssl0'@'%' IDENTIFIED BY 'ssl' REQUIRE SSL;  
SHOW GRANTS FOR cliente_ssl0;
```

MySQL 5.

```
CREATE USER 'cliente_ssl0'@'%' IDENTIFIED BY 'ssl' REQUIRE SSL;  
GRANT ALL ON *.* TO 'cliente_ssl0'@'%';  
SHOW GRANTS FOR 'cliente_ssl0'@'%';
```

MySQL 8.



```
GRANT ALL PRIVILEGES ON *.* TO 'cliente_ssl'@'%' IDENTIFIED BY 'ssl' REQUIRE X509;
```

MySQL 5.

```
CREATE USER 'cliente_ssl'@'%' IDENTIFIED BY 'ssl' REQUIRE X509;  
GRANT ALL ON *.* TO 'cliente_ssl'@'%';  
SHOW GRANTS FOR 'cliente_ssl'@'%';
```

MySQL 8.