

Creacion de la Base de Datos

```

MySQL 5.7 Command Line Client

Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 4
Server version: 5.7.19-log MySQL Community Server (GPL)

Copyright (c) 2000, 2017, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database Control;
Query OK, 1 row affected (0.05 sec)

mysql> use Control;
Database changed
mysql> _

```

Creación de las tablas

```

MySQL 5.7 Command Line Client

mysql> create table Presenta (no_examen int, matricula varchar(10), calif float
(5), foreign key (no_examen) references Examen (no_examen), foreign key (matricu
la) references Alumno(matricula));
Query OK, 0 rows affected (0.34 sec)

mysql> 5
-> create table Realiza (matricula varchar(10), cod_practica int , fecha var
char (10), calif float (5), foreign key (matricula) references Alumno(matricula)
, foreign key (cod_practica) references Practica(cod_practica) );
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near '5
create table Realiza (matricula varchar(10), cod_practica int , fecha varchar '
at line 1
mysql> create table Diseña (cod_practica int, no_personal varchar(10), fecha var
char(10), foreign key (cod_practica) references Practica (cod_practica), foreign
key (no_personal) references Profesor (no_personal));
Query OK, 0 rows affected (0.64 sec)

mysql> create table Realiza (matricula varchar(10), cod_practica int , fecha var
char (10), calif float (5), foreign key (matricula) references Alumno(matricula)
, foreign key (cod_practica) references Practica(cod_practica) );
Query OK, 0 rows affected (0.55 sec)

mysql> _

```

Mostrar tablas

```

MySQL 5.7 Command Line Client

corresponds to your MySQL server version for the right syntax to use near 'dresc
ribe alumno' at line 1
mysql> describe Alumno;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| matricula | varchar(10) | NO | PRI | NULL |  |
| nombre | varchar(30) | YES |  | NULL |  |
| grupo | int(11) | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.13 sec)

mysql> describe Examen;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_examen | int(11) | NO | PRI | NULL |  |
| no_preguntas | int(11) | YES |  | NULL |  |
| fecha | varchar(10) | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.05 sec)

mysql> describe Practica;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| cod_practica | int(11) | NO | PRI | NULL |  |
| titulo | varchar(20) | YES |  | NULL |  |
| grado | varchar(10) | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> _

```

```

MySQL 5.7 Command Line Client

3 rows in set (0.00 sec)

mysql> describe Profesor;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_personal | varchar(10) | NO | PRI | NULL |  |
| nombre | varchar(30) | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+

2 rows in set (0.06 sec)

mysql> describe Presenta;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| no_examen | int(11) | YES | MUL | NULL |  |
| matricula | varchar(10) | YES | MUL | NULL |  |
| calif | float | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+

3 rows in set (0.06 sec)

mysql> describe Realiza;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| matricula | varchar(10) | YES | MUL | NULL |  |
| cod_practica | int(11) | YES | MUL | NULL |  |
| fecha | varchar(10) | YES |  | NULL |  |
| calif | float | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+

4 rows in set (0.06 sec)

mysql> describe Diseña;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| cod_practica | int(11) | YES | MUL | NULL |  |
| no_personal | varchar(10) | YES | MUL | NULL |  |
| fecha | varchar(10) | YES |  | NULL |  |
+-----+-----+-----+-----+-----+-----+

3 rows in set (0.05 sec)

mysql>

```

Llenar tablas

```

MySQL 5.7 Command Line Client

mysql> insert into Alumno values ('s16013961', 'Montserrat Montero Muñiz', 2);
Query OK, 1 row affected (0.13 sec)

mysql> insert into Alumno values ('s16014096', 'Carlos Huerta Araujo', 1);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Alumno values ('s16012594', 'Miguel Perez', 1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into Alumno values ('s16011020', 'Isabel Lopez', 2);
Query OK, 1 row affected (0.05 sec)

mysql> insert into Alumno values ('s12010602', 'Arturo Jimenez', 2);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Alumno values ('s12011069', 'Hector Figueroa', 2);
Query OK, 1 row affected (0.05 sec)

mysql> insert into Alumno values ('s15015024', 'Luis Antonio Del Moral', 1);
Query OK, 1 row affected (0.05 sec)

mysql> insert into Examen values (10, 50, '21/10/2017');
Query OK, 1 row affected (0.00 sec)

mysql> insert into Examen values (20, 82, '21/10/2017');
Query OK, 1 row affected (0.05 sec)

mysql> insert into Examen values (30, 40, '21/10/2017');
Query OK, 1 row affected (0.06 sec)

mysql> insert into Examen values (40, 25, '21/10/2017');
Query OK, 1 row affected (0.06 sec)

mysql> insert into Examen values (50, 100, '21/10/2017');
Query OK, 1 row affected (0.03 sec)

mysql> insert into Examen values (60, 65, '21/10/2017');
Query OK, 1 row affected (0.06 sec)

mysql> insert into Examen values (70, 10, '21/10/2017');
Query OK, 1 row affected (0.00 sec)

```

```

MySQL 5.7 Command Line Client

Query OK, 1 row affected (0.00 sec)

mysql> select * from Alumnos;
ERROR 1146 (42S02): Table 'control.alumnos' doesn't exist

mysql> select * from Alumno;
+-----+-----+-----+
| matricula | nombre | grupo |
+-----+-----+-----+
| s12011069 | Hector Figueroa | 2 |
| s12010602 | Arturo Jimenez | 2 |
| s15015024 | Luis Antonio Del Moral | 1 |
| s16011020 | Isabel Lopez | 2 |
| s16012594 | Miguel Perez | 1 |
| s16013961 | Montserrat Montero Muñiz | 2 |
| s16014096 | Carlos Huerta Araujo | 1 |
+-----+-----+-----+

7 rows in set (0.05 sec)

mysql> select * from Examen;
+-----+-----+-----+
| no_examen | no_preguntas | fecha |
+-----+-----+-----+
| 10 | 50 | 21/10/2017 |
| 20 | 82 | 21/10/2017 |
| 30 | 40 | 21/10/2017 |
| 40 | 25 | 21/10/2017 |
| 50 | 100 | 21/10/2017 |
| 60 | 65 | 21/10/2017 |
| 70 | 10 | 21/10/2017 |
+-----+-----+-----+

7 rows in set (0.00 sec)

mysql>

```

```

MySQL 5.7 Command Line Client
Query OK, 1 row affected (0.06 sec)
mysql> insert into Practica values (5,'Algebra Relacional', 'Medio');
Query OK, 1 row affected (0.08 sec)
mysql> insert into Practica values (10,'Base de Datos', 'Bajo');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Practica values (15,'Modelo ER', 'Medio');
Query OK, 1 row affected (0.11 sec)
mysql> insert into Practica values (20,'Modelo Relacional', 'Alto');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Practica values (25,'Normalizacion', 'Alto');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Practica values (30,'Diccionario de Datos', 'Bajo');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Practica values (35,'SQL', 'Medio');
Query OK, 1 row affected (0.06 sec)
mysql> insert into Profesor values (100,'Lorena Alonso Ramirez');
Query OK, 1 row affected (0.08 sec)
mysql> insert into Profesor values (200,'Jose de Jesus Martinez');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Profesor values (300,'Elizabeth Guevara Roa');
Query OK, 1 row affected (0.05 sec)
mysql> insert into Profesor values (400,'Luis Gerardo Montane Jimenez');
Query OK, 1 row affected (0.08 sec)
mysql> insert into Profesor values (500,'Candy Obdulia Sosa Jimenez');
Query OK, 1 row affected (0.05 sec)
mysql> insert into Profesor values (600,'Angel Juan Sanchez ');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Profesor values (700,'Edna Lopez Olan');
Query OK, 1 row affected (0.11 sec)
mysql>

```

```

MySQL 5.7 Command Line Client
+-----+-----+-----+
| 70 | 10 | 21/10/2017 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from Practica;
+-----+-----+-----+
| cod_practica | titulo | grado |
+-----+-----+-----+
| 5 | Algebra Relacional | Medio |
| 10 | Base de Datos | Bajo |
| 15 | Modelo ER | Medio |
| 20 | Modelo Relacional | Alto |
| 25 | Normalizacion | Alto |
| 30 | Diccionario de Datos | Bajo |
| 35 | SQL | Medio |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from Profesor;
+-----+-----+
| no_personal | nombre |
+-----+-----+
| 100 | Lorena Alonso Ramirez |
| 200 | Jose de Jesus Martinez |
| 300 | Elizabeth Guevara Roa |
| 400 | Luis Gerardo Montane Jimenez |
| 500 | Candy Obdulia Sosa Jimenez |
| 600 | Angel Juan Sanchez |
| 700 | Edna Lopez Olan |
+-----+-----+
7 rows in set (0.00 sec)

mysql>

```

```

MySQL 5.7 Command Line Client
Query OK, 1 row affected (0.11 sec)
mysql> insert into Presenta values (10,'s16013961',7.5);
Query OK, 1 row affected (0.09 sec)
mysql> insert into Presenta values (30,'s15015824',8.5);
Query OK, 1 row affected (0.05 sec)
mysql> insert into Presenta values (60,'s16014096',10);
Query OK, 1 row affected (0.17 sec)
mysql> insert into Presenta values (10,'s16011020',5.5);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Presenta values (20,'s16012594',6.2);
Query OK, 1 row affected (0.05 sec)
mysql> insert into Presenta values (20,'s12011069',7.1);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Presenta values (60,'s12018602',4.5);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Realiza values ('s16013961',20,'01/12/2017',7.2);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Realiza values ('s16014096',10,'01/12/2017',9);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Realiza values ('s16012594',5,'01/12/2017',8);
Query OK, 1 row affected (0.05 sec)
mysql> insert into Realiza values ('s16011020',20,'01/12/2017',6.9);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Realiza values ('s12018602',5,'01/12/2017',7.5);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Realiza values ('s12011069',10,'01/12/2017',8.2);
Query OK, 1 row affected (0.05 sec)
mysql> insert into Realiza values ('s15015824',30,'01/12/2017',10);
Query OK, 1 row affected (0.09 sec)
mysql>

```

```

MySQL 5.7 Command Line Client
+-----+-----+-----+
| 70 | 10 | 21/10/2017 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from Presenta;
+-----+-----+-----+
| no_examen | matricula | calif |
+-----+-----+-----+
| 10 | s16013961 | 7.5 |
| 30 | s15015824 | 8.5 |
| 60 | s16014096 | 10 |
| 10 | s16011020 | 5.5 |
| 20 | s16012594 | 6.2 |
| 20 | s12011069 | 7.1 |
| 60 | s12018602 | 4.5 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from Realiza;
+-----+-----+-----+-----+
| matricula | cod_practica | fecha | calif |
+-----+-----+-----+-----+
| s16013961 | 20 | 01/12/2017 | 7.2 |
| s16014096 | 10 | 01/12/2017 | 9 |
| s16012594 | 5 | 01/12/2017 | 8 |
| s16011020 | 20 | 01/12/2017 | 6.9 |
| s12018602 | 5 | 01/12/2017 | 7.5 |
| s12011069 | 10 | 01/12/2017 | 8.2 |
| s15015824 | 30 | 01/12/2017 | 10 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from Diseña;
+-----+-----+-----+
| cod_practica | no_personal | fecha |
+-----+-----+-----+
| 20 | 100 | 01/12/2015 |
| 30 | 500 | 05/12/2015 |
| 35 | 200 | 09/03/2017 |
| 19 | 300 | 15/05/2017 |
| 25 | 600 | 30/11/2016 |
| 15 | 400 | 27/02/2017 |
| 5 | 700 | 21/02/2016 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>

```

```

MySQL 5.7 Command Line Client
mysql> insert into Realiza values ('s16014096',10,'01/12/2017',9);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Realiza values ('s16012594',5,'01/12/2017',8);
Query OK, 1 row affected (0.05 sec)
mysql> insert into Realiza values ('s16011020',20,'01/12/2017',6.9);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Realiza values ('s12018602',5,'01/12/2017',7.5);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Realiza values ('s12011069',10,'01/12/2017',8.2);
Query OK, 1 row affected (0.05 sec)
mysql> insert into Realiza values ('s15015824',30,'01/12/2017',10);
Query OK, 1 row affected (0.09 sec)
mysql> insert into Diseña values (20,100,'01/12/2015');
Query OK, 1 row affected (0.09 sec)
mysql> insert into Diseña values (5,700,'21/02/2016');
ERROR 1406 (22001): Data too long for column 'fecha' at row 1
mysql> insert into Diseña values (30,500,'05/12/2015');
Query OK, 1 row affected (0.05 sec)
mysql> insert into Diseña values (35,200,'09/03/2017');
Query OK, 1 row affected (0.14 sec)
mysql> insert into Diseña values (10,300,'16/05/2017');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Diseña values (25,600,'30/11/2016');
Query OK, 1 row affected (0.16 sec)
mysql> insert into Diseña values (15,400,'27/02/2017');
Query OK, 1 row affected (0.05 sec)
mysql> insert into Diseña values (5,700,'21/02/2016');
Query OK, 1 row affected (0.08 sec)
mysql>

```

Consultas

Una sola tabla

```

MySQL 5.7 Command Line Client
+----+-----+-----+
| 35 | 200 | 09/03/2017 |
| 10 | 300 | 16/05/2017 |
| 25 | 600 | 30/11/2016 |
| 15 | 400 | 27/02/2017 |
| 5  | 700 | 21/02/2016 |
+----+-----+-----+
7 rows in set (0.00 sec)

mysql> select matricula from Alumno;
+-----+
| matricula |
+-----+
| s12011069 |
| s12010602 |
| s15015824 |
| s16011020 |
| s16012594 |
| s16013961 |
| s16014096 |
+-----+
7 rows in set (0.03 sec)

mysql> select matricula from Alumno where grupo=2;
+-----+
| matricula |
+-----+
| s12011069 |
| s12010602 |
| s16011020 |
| s16013961 |
+-----+
4 rows in set (0.05 sec)

mysql> select * from Alumno where grupo =1;
+-----+-----+-----+
| matricula | nombre           | grupo |
+-----+-----+-----+
| s15015824 | Luis Antonio Del Moral | 1     |
| s16012594 | Miguel Perez       | 1     |
| s16014096 | Carlos Huerta Araujo | 1     |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select matricula, nombre from Alumno where matricula like "%160%";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near '%160%'

```

```

MySQL 5.7 Command Line Client
t line 1
mysql> select matricula, nombre from Alumno where matricula like 's160%';
+-----+-----+
| matricula | nombre           |
+-----+-----+
| s16011020 | Isabel Lopez     |
| s16012594 | Miguel Perez     |
| s16013961 | Monserrat Montero Muñiz |
| s16014096 | Carlos Huerta Araujo |
+-----+-----+
4 rows in set (0.02 sec)

mysql> _

```

Involucran mas de 1 tablas

```

mysql> Select nombre from Profesor natural join (Diseña natural join Practica) where titulo='Modelo ER';
+-----+
| nombre |
+-----+
| Luis Gerardo Montane Jimenez |
+-----+
1 row in set (0.00 sec)

mysql> Select nombre from Alumno a, Realiza r where a.matricula=r.matricula and calif >8;
+-----+
| nombre |
+-----+
| Carlos Huerta Araujo |
| Hector Figueroa |
| Luis Antonio Del Moral |
+-----+
3 rows in set (0.00 sec)

mysql> select * from Alumno natural join Practica where grado = 'Alto';
+-----+
| matricula | nombre | grupo | cod_practica | titulo |
+-----+
| s12011069 | Hector Figueroa | 2 | 20 | Modelo Relaciona |
| s12011069 | Hector Figueroa | 2 | 25 | Normalizacion |
| s12013602 | Arturo Jimenez | 2 | 20 | Modelo Relaciona |
| s12013602 | Arturo Jimenez | 2 | 25 | Normalizacion |
| s15015824 | Luis Antonio Del Moral | 1 | 20 | Modelo Relaciona |
| s15015824 | Luis Antonio Del Moral | 1 | 25 | Normalizacion |
| s16011020 | Isabel Lopez | 2 | 20 | Modelo Relaciona |
| s16011020 | Isabel Lopez | 2 | 25 | Normalizacion |
| s16012594 | Miguel Perez | 1 | 20 | Modelo Relaciona |
| s16012594 | Miguel Perez | 1 | 25 | Normalizacion |
| s16013961 | Monserrat Montero Muñiz | 2 | 20 | Modelo Relaciona |
| s16013961 | Monserrat Montero Muñiz | 2 | 25 | Normalizacion |
| s16014096 | Carlos Huerta Araujo | 1 | 20 | Modelo Relaciona |
| s16014096 | Carlos Huerta Araujo | 1 | 25 | Normalizacion |
+-----+

```

```

mysql> select nombre from Profesor natural join Diseña where fecha like '%2015';
+-----+
| nombre |
+-----+
| Lorena Alonso Ramirez |
| Candy Obdulia Sosa Jimenez |
+-----+
2 rows in set (0.00 sec)

mysql> _

```

Funciones de agregacion

```

mysql> Select avg(calif) from Realiza;
+-----+
| avg(calif) |
+-----+
| 8.114205673413958 |
+-----+
1 row in set (0.06 sec)

mysql> select max(calif) from Presenta;
+-----+
| max(calif) |
+-----+
| 10 |
+-----+
1 row in set (0.06 sec)

mysql> select count(grado) from Practica where grado= 'Bajo';
ERROR 1064 (42000): You have an error in your SQL syntax; check the
corresponds to your MySQL server version for the right syntax to use
ica where grado= 'Bajo' at line 1
mysql> _

```

```

mysql> select count(grado) from Practica where grado= 'Bajo';
+-----+
| count(grado) |
+-----+
| 2 |
+-----+
1 row in set (0.00 sec)

mysql> select count(no_preguntas) from Examen where no_preguntas>35;
ERROR 1630 (42000): FUNCTION control.count does not exist. Check the 'Function N
ame Parsing and Resolution' section in the Reference Manual
mysql> select count(no_preguntas) from Examen where no_preguntas>35;
+-----+
| count(no_preguntas) |
+-----+
| 5 |
+-----+
1 row in set (0.00 sec)

mysql> _

```

Subconsultas

```

MySQL 5.7 Command Line Client
mysql> select nombre from Alumno a, (select * from Practica where titulo = 'Modelo Relacional')p, Realiza r where a.matricula = r.matricula and r.cod_practica = p.cod_practica;
+-----+
| nombre |
+-----+
| Monserrat Montero Muñiz |
| Isabel Lopez |
+-----+
2 rows in set (0.28 sec)

mysql>

```

```

MySQL 5.7 Command Line Client
1 row in set (0.09 sec)

mysql> Select nombre from Profesor natural join ((select * from Practica where titulo = 'Normalizacion')p natural join Diseña );
+-----+
| nombre |
+-----+
| Angel Juan Sanchez |
+-----+
1 row in set (0.00 sec)

mysql> ^C
mysql>

```

```

MySQL 5.7 Command Line Client
mysql> ^C
mysql> Select nombre from Alumno natural join ((select * from Examen where fecha = '21/10/2017')e natural join Presenta );
+-----+
| nombre |
+-----+
| Monserrat Montero Muñiz |
| Isabel Lopez |
| Miguel Perez |
| Hector Figueroa |
| Luis Antonio Del Moral |
| Carlos Huerta Araujo |
| Arturo Jimenez |
+-----+
7 rows in set (0.06 sec)

mysql> select nombre from Profesor p1, (select * from Diseña where fecha like '%2015%'d, Practica p2 where p1.no_personal = d.no_personal and d.cod_practica = p2.cod_practica ;
+-----+
| nombre |
+-----+
| Lorena Alonso Ramirez |
| Candy Obdulia Sosa Jimenez |
+-----+
2 rows in set (0.00 sec)

mysql>

```

```

MySQL 5.7 Command Line Client
mysql> select nombre from Profesor p1, (select * from Diseña where fecha like '%2016%'d, Practica p2 where p1.no_personal = d.no_personal and d.cod_practica = p2.cod_practica ;
+-----+
| nombre |
+-----+
| Angel Juan Sanchez |
| Edna Lopez Olan |
+-----+
2 rows in set (0.00 sec)

mysql>

```

Usuarios

```

C:\Windows\system32\cmd.exe - mysql -u Monse -p
Microsoft Windows [Versión 6.3.9600]
(c) 2013 Microsoft Corporation. Todos los derechos reservados.

C:\Users\Monse>mysql
ERROR 1045 (28000): Access denied for user 'ODBC'@'localhost' (using password: NO)

C:\Users\Monse>mysql -u Monse -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 6
Server version: 5.7.19-log MySQL Community Server (GPL)

Copyright (c) 2000, 2017, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> _

```

```

MySQL 5.7 Command Line Client

mysql> grant all privileges on *.* to Monse@'localhost' identified by 'proyecto'
;
Query OK, 0 rows affected, 1 warning (0.13 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.06 sec)

```

```

mysql> grant all privileges on Control.Alumnos to prueba@'localhost' identified
by '12345';
^?
^C
mysql> grant all privileges on Control.Alumnos to 'prueba'@'localhost' identifie
d;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near ';' at
line 1
mysql> grant select on Control.Alumnos to 'prueba'@'localhost' identified;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near ';' at
line 1
mysql> grant select on Control.Alumnos to 'prueba'@'localhost';
ERROR 1146 (42S02): Table 'control.Alumnos' doesn't exist
mysql> grant select on Control.Alumno to 'prueba'@'localhost';
Query OK, 0 rows affected (0.06 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.00 sec)

mysql> _

```

```

C:\Windows\system32\cmd.exe - mysql -u prueba -p

mysql> exit
Bye

C:\Users\Monse>mysql -u prueba -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 5.7.19-log MySQL Community Server (GPL)

Copyright (c) 2000, 2017, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use control;
Database changed
mysql> describe Alumno;
+----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+-----+
| matricula | varchar(10) | NO | PRI | NULL | |
| nombre | varchar(30) | YES | | NULL | |
| grupo | int(11) | YES | | NULL | |
+----+-----+-----+-----+-----+-----+
3 rows in set (0.06 sec)

mysql> describe Profesor;
ERROR 1142 (42000): SELECT command denied to user 'prueba'@'localhost' for tabl
'profesor'
mysql>

```

Update

```

ERROR 1146 (42S02): Table 'control.alumnos' doesn't exist
mysql> select * from Alumno;
+----+-----+-----+
| matricula | nombre | grupo |
+----+-----+-----+
| s12011069 | Hector Figueroa | 2 |
| s12018602 | Arturo Jimenez | 2 |
| s15015824 | Luis Antonio Del Moral | 1 |
| s16011020 | Isabel Lopez | 2 |
| s16012594 | Miguel Perez | 1 |
| s16013961 | Monserrat Montero Muffiz | 2 |
| s16014096 | Carlos Huerta Araujo | 1 |
+----+-----+-----+
3 rows in set (0.05 sec)

```

```

mysql> use control;
Database changed
mysql> update Alumno set nombre = 'Miguel Antonio Santiago Perez' where nombre =
'Miguel Perez';
Query OK, 1 row affected (0.19 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from Alumno;
+-----+-----+-----+
| matricula | nombre | grupo |
+-----+-----+-----+
| s12011069 | Hector Figueroa | 2 |
| s12018602 | Arturo Jimenez | 2 |
| s15015824 | Luis Antonio Del Moral | 1 |
| s1601020 | Isabel Lopez | 2 |
| s16012594 | Miguel Antonio Santiago Perez | 1 |
| s16013961 | Monserrat Montero Mufiz | 2 |
| s16014096 | Carlos Huerta Braujo | 1 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>

```

```

mysql> select * from Practica
-> ;
+-----+-----+-----+
| cod_practica | titulo | grado |
+-----+-----+-----+
| 5 | Algebra Relacional | Medio |
| 10 | Base de Datos | Bajo |
| 15 | Modelo ER | Medio |
| 20 | Modelo Relacional | Alto |
| 25 | Normalizacion | Alto |
| 30 | Diccionario de Datos | Bajo |
| 35 | SQL | Medio |
+-----+-----+-----+
7 rows in set (0.02 sec)

mysql> update Practica set grado = 'Medio' where titulo = 'Base de Datos';
Query OK, 1 row affected (0.09 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from Practica;
+-----+-----+-----+
| cod_practica | titulo | grado |
+-----+-----+-----+
| 5 | Algebra Relacional | Medio |
| 10 | Base de Datos | Medio |
| 15 | Modelo ER | Medio |
| 20 | Modelo Relacional | Alto |
| 25 | Normalizacion | Alto |
| 30 | Diccionario de Datos | Bajo |
| 35 | SQL | Medio |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>

```

Delete

```

mysql> select * from Practica;
+-----+-----+-----+
| cod_practica | titulo | grado |
+-----+-----+-----+
| 5 | Algebra Relacional | Medio |
| 10 | Base de Datos | Bajo |
| 15 | Modelo ER | Medio |
| 20 | Modelo Relacional | Alto |
| 25 | Normalizacion | Alto |
| 30 | Diccionario de Datos | Bajo |
| 35 | SQL | Medio |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from Presenta;
+-----+-----+-----+
| no_examen | matricula | calif |
+-----+-----+-----+
| 10 | s16013961 | 7.5 |
| 30 | s15015824 | 8.5 |
| 60 | s16014096 | 10 |
| 10 | s16011020 | 5.5 |
| 20 | s16012594 | 6.2 |
| 20 | s12011069 | 7.1 |
| 60 | s12018602 | 4.5 |
+-----+-----+-----+
7 rows in set (0.01 sec)

mysql> delete from Presenta where calif < 5;
Query OK, 1 row affected (0.13 sec)

mysql> select * from Presenta;
+-----+-----+-----+
| no_examen | matricula | calif |
+-----+-----+-----+
| 10 | s16013961 | 7.5 |
| 30 | s15015824 | 8.5 |
| 60 | s16014096 | 10 |
| 10 | s16011020 | 5.5 |
| 20 | s16012594 | 6.2 |
| 20 | s12011069 | 7.1 |
+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>

```

```

mysql> select * from Diseña;
+-----+-----+-----+
| cod_practica | no_personal | fecha |
+-----+-----+-----+
| 20 | 100 | 01/12/2015 |
| 30 | 500 | 05/12/2015 |
| 35 | 200 | 09/03/2017 |
| 10 | 300 | 16/05/2017 |
| 25 | 600 | 30/11/2016 |
| 15 | 400 | 27/02/2017 |
| 5 | 700 | 21/02/2016 |
+-----+-----+-----+
7 rows in set (0.02 sec)

mysql> delete from Diseña where fecha like '%2015';
Query OK, 2 rows affected (0.11 sec)

mysql> select * from Diseña;
+-----+-----+-----+
| cod_practica | no_personal | fecha |
+-----+-----+-----+
| 35 | 200 | 09/03/2017 |
| 10 | 300 | 16/05/2017 |
| 25 | 600 | 30/11/2016 |
| 15 | 400 | 27/02/2017 |
| 5 | 700 | 21/02/2016 |
+-----+-----+-----+
5 rows in set (0.00 sec)

```

Vistas

```

mysql> create view Alumnos3er as select matricula, nombre, grupo from Alumno where
matricula like '%s160';
Query OK, 0 rows affected (0.06 sec)

mysql> select * from Alumnos3er;
Empty set (0.05 sec)

mysql> show tables;
+-----+
| Tables_in_control |
+-----+
| alumno |
| alumnos3er |
| diseña |
| examen |
| practica |
| presenta |
| profesor |
| realiza |
+-----+
8 rows in set (0.00 sec)

```



```

MySQL 5.7 Command Line Client

mysql> create view TipoExamen as select matricula,calif,fecha from Examen e, Pre
senta p where no_preguntas >40 and e.no_examen = p.no_examen;
Query OK, 0 rows affected (0.11 sec)

mysql> select * from TipoExamen;
+-----+-----+-----+
| matricula | calif | fecha |
+-----+-----+-----+
| s16013961 | 7.5   | 21/10/2017 |
| s16014096 | 10    | 21/10/2017 |
| s16011020 | 5.5   | 21/10/2017 |
| s16012594 | 6.2   | 21/10/2017 |
| s12011069 | 7.1   | 21/10/2017 |
+-----+-----+-----+
5 rows in set (0.03 sec)

mysql>

```

Triggers

```

MySQL 5.7 Command Line Client

mysql> create table Calificaciones (matricula varchar(10), calif1 float (5), cal
if2 float (5), prom float (5), foreign key (matricula) references Alumno(matric
ula));
Query OK, 0 rows affected (0.41 sec)

mysql> describe Calificaciones;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| matricula | varchar(10) | YES | MUL | NULL | |
| calif1 | float | YES | | NULL | |
| calif2 | float | YES | | NULL | |
| prom | float | YES | | NULL | |
+-----+-----+-----+-----+-----+
4 rows in set (0.02 sec)

mysql> insert into Calificaciones values ('s16013961', 9.2,7,0);
Query OK, 1 row affected (0.08 sec)

mysql> insert into Calificaciones values ('s16014096',9.2,6.5,0);
Query OK, 1 row affected (0.05 sec)

mysql> insert into Calificaciones values ('s16012594',6.8,8,0);
Query OK, 1 row affected (0.09 sec)

mysql> insert into Calificaciones values ('s16011020',8.9,9.1,0);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Calificaciones values ('s12018602',5.5,6.2,0);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Calificaciones values ('s12011069',6.2,8,0);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Calificaciones values ('s15015824',7.9,0);
Query OK, 1 row affected (0.03 sec)

mysql>

```

```

MySQL 5.7 Command Line Client

Query OK, 1 row affected (0.03 sec)

mysql> select * from Calificaciones;
+-----+-----+-----+-----+
| matricula | calif1 | calif2 | prom |
+-----+-----+-----+-----+
| s16013961 | 9.2    | 7       | 0     |
| s16014096 | 9.2    | 6.5     | 0     |
| s16012594 | 6.8    | 8       | 0     |
| s16011020 | 8.9    | 9.1     | 0     |
| s12018602 | 5.5    | 6.2     | 0     |
| s12011069 | 6.2    | 8       | 0     |
| s15015824 | 7       | 9       | 0     |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
mysql> Delimiter //
mysql> Create trigger calpromedio before insert on Calificaciones
-> For each row
-> begin
-> set new.prom= (new.calif1 +new.calif2 )/2;
-> end;
//
Query OK, 0 rows affected (0.09 sec)

mysql> Delimiter ;
mysql> select * from Calificaciones;
+-----+-----+-----+-----+
| matricula | calif1 | calif2 | prom |
+-----+-----+-----+-----+
| s16013961 | 9.2    | 7       | 0     |
| s16014096 | 9.2    | 6.5     | 0     |
| s16012594 | 6.8    | 8       | 0     |
| s16011020 | 8.9    | 9.1     | 0     |
| s12018602 | 5.5    | 6.2     | 0     |
| s12011069 | 6.2    | 8       | 0     |
| s15015824 | 7       | 9       | 0     |
+-----+-----+-----+-----+

```

```

MySQL 5.7 Command Line Client

ERROR 1215 (HY000): Cannot add foreign key constraint
mysql> create table Comisiones (no_personal int, comision float, foreign key (no
personal) references Profesor (no_personal));
ERROR 1215 (HY000): Cannot add foreign key constraint
mysql> create table Comisiones (no_personal varchar(10), comision float, foreign
key (no_personal) references Profesor (no_personal));
Query OK, 0 rows affected (0.34 sec)

mysql> describe Comisiones;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| no_personal | varchar(10) | YES | MUL | NULL | |
| comision | float | YES | | NULL | |
+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql> insert into Comisiones values (100, 250);
Query OK, 1 row affected (0.08 sec)

mysql> insert into Comisiones values (200, 400);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Comisiones values (300, 650);
Query OK, 1 row affected (0.17 sec)

mysql> insert into Comisiones values (400, 300);
Query OK, 1 row affected (0.02 sec)

mysql> insert into Comisiones values (500, 250);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Comisiones values (600, 400);
Query OK, 1 row affected (0.02 sec)

mysql> insert into Comisiones values (700, 500);
Query OK, 1 row affected (0.03 sec)

mysql>

```

```

MySQL 5.7 Command Line Client

2 rows in set (0.01 sec)

mysql> insert into Comisiones values (100, 250);
Query OK, 1 row affected (0.08 sec)

mysql> insert into Comisiones values (200, 400);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Comisiones values (300, 650);
Query OK, 1 row affected (0.17 sec)

mysql> insert into Comisiones values (400, 300);
Query OK, 1 row affected (0.02 sec)

mysql> insert into Comisiones values (500, 250);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Comisiones values (600, 400);
Query OK, 1 row affected (0.02 sec)

mysql> insert into Comisiones values (700, 500);
Query OK, 1 row affected (0.03 sec)

mysql> select * from Comisiones;
+-----+-----+
| no_personal | comision |
+-----+-----+
| 100         | 250      |
| 200         | 400      |
| 300         | 650      |
| 400         | 300      |
| 500         | 250      |
| 600         | 400      |
| 700         | 500      |
+-----+-----+
7 rows in set (0.00 sec)

mysql>

```

```

MySQL 5.7 Command Line Client

mysql> Delimiter ;
mysql> Delimiter //
mysql> Create trigger agregaComision after insert on Profesor
-> For each row
-> Begin
-> Insert into Comisiones values(new.no_personal, comision*10);
-> End;
-> //
Query OK, 0 rows affected (0.09 sec)

mysql> Delimiter ;
mysql> select * from Comisiones;
+-----+-----+
| no_personal | comision |
+-----+-----+
| 100         | 250      |
| 200         | 400      |
| 300         | 650      |
| 400         | 300      |
| 500         | 250      |
| 600         | 400      |
| 700         | 500      |
+-----+-----+
7 rows in set (0.00 sec)

mysql>

```

Procedimientos

```

MySQL 5.7 Command Line Client

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near 'Exame
n' at line 1
mysql> select * from Examen;
+-----+-----+-----+
| no_examen | no_preguntas | fecha      |
+-----+-----+-----+
| 10        | 50            | 21/10/2017 |
| 20        | 82            | 21/10/2017 |
| 30        | 40            | 21/10/2017 |
| 40        | 25            | 21/10/2017 |
| 50        | 100           | 21/10/2017 |
| 60        | 65            | 21/10/2017 |
| 70        | 10            | 21/10/2017 |
+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> Delimiter //
mysql> create procedure aumentarpreguntas()
-> begin
-> update Examen set no.preguntas=no.preguntas + 10;
-> end
-> //
Query OK, 0 rows affected (0.11 sec)

mysql> Delimiter;

```