

```
mysql> CREATE TABLE Departamento(NombreDpto VARCHAR(50) NOT NULL, NumDpto INT NOT NULL PRIMARY KEY,DniDirector VARCHAR(9) NOT NULL, FechaIngresoDirector VARCHAR(10) NOT NULL);
Query OK, 0 rows affected (1.22 sec)

mysql> DESCRIBE Departamento;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NombreDpto | varchar(50) | NO | | NULL | |
| NumDpto | int(11) | NO | PRI | NULL | |
| DniDirector | varchar(9) | NO | | NULL | |
| FechaIngresoDirector | varchar(10) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> CREATE TABLE Empleado(Nombre VARCHAR(50) NOT NULL, Apellido1 VARCHAR(50) NOT NULL, Apellido2 VARCHAR(50), Dni VARCHAR(10) NOT NULL PRIMARY KEY, FechaNac VARCHAR(10) NOT NULL, Direccion VARCHAR(50) NOT NULL, Sexo CHAR NOT NULL CHECK (Sexo IN('H','M')), Sueldo FLOAT NOT NULL, SuperDni VARCHAR(10), Dno INT NOT NULL, FOREIGN KEY (SuperDni) REFERENCES Empleado(Dni) ON UPDATE CASCADE ON DELETE CASCADE, FOREIGN KEY (Dno) REFERENCES Departamento(NumDpto) ON UPDATE CASCADE ON DELETE CASCADE);
Query OK, 0 rows affected (1.05 sec)

mysql> DESCRIBE Empleado;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Nombre | varchar(50) | NO | | NULL | |
| Apellido1 | varchar(50) | NO | | NULL | |
| Apellido2 | varchar(50) | YES | | NULL | |
| Dni | varchar(10) | NO | PRI | NULL | |
| FechaNac | varchar(10) | NO | | NULL | |
| Direccion | varchar(50) | NO | | NULL | |
| Sexo | char(1) | NO | | NULL | |
| Sueldo | float | NO | | NULL | |
| SuperDni | varchar(10) | YES | MUL | NULL | |
| Dno | int(11) | NO | MUL | NULL | |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql>
```

```
mysql> CREATE TABLE Localizaciones_Dpto(NumDpto INT NOT NULL, UbicacionDpto VARCHAR(50) NOT NULL, PRIMARY KEY(NumDpto,UbicacionDpto), FOREIGN KEY(NumDpto) REFERENCES Departamento(NumDpto));
Query OK, 0 rows affected (0.44 sec)

mysql> DESCRIBE Localizaciones_Dpto;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NumDpto | int(11) | NO | PRI | NULL | |
| UbicacionDpto | varchar(50) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> CREATE TABLE Subordinado(DniEmpleado VARCHAR(10) NOT NULL, NombSubordinado VARCHAR(50) NOT NULL, Sexo CHAR NOT NULL CHECK(Sexo IN('H','M')), FechaNac VARCHAR(10) NOT NULL, Relacion VARCHAR(30) NOT NULL, PRIMARY KEY(DniEmpleado,NombSubordinado), FOREIGN KEY(DniEmpleado) REFERENCES Empleado(Dni) ON UPDATE CASCADE ON DELETE CASCADE);
Query OK, 0 rows affected (0.68 sec)

mysql> DESCRIBE Subordinado;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| DniEmpleado | varchar(10) | NO | PRI | NULL | |
| NombSubordinado | varchar(50) | NO | PRI | NULL | |
| Sexo | char(1) | NO | | NULL | |
| FechaNac | varchar(10) | NO | | NULL | |
| Relacion | varchar(30) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

Windows taskbar at the bottom shows the search bar with "Escribe aquí para buscar", task icons for various applications, and system tray information including the time "03:35 p.m." and date "19/09/2019".

```
Símbolo del sistema - mysql -u root -p
5 rows in set (0.00 sec)

mysql> CREATE TABLE Proyecto(NombreProyecto VARCHAR(50) NOT NULL, NumProyecto INT NOT NULL PRIMARY KEY, UbicacionProyecto VARCHAR(50) NOT NULL, NumDptoProyecto INT NOT NULL);
Query OK, 0 rows affected (0.75 sec)

mysql> DESCRIBE Proyecto;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NombreProyecto | varchar(50) | NO | | NULL | |
| NumProyecto | int(11) | NO | PRI | NULL | |
| UbicacionProyecto | varchar(50) | NO | | NULL | |
| NumDptoProyecto | int(11) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.29 sec)

mysql> CREATE TABLE trabaja_en(DniEmpleado VARCHAR(10) NOT NULL, NumProy INT NOT NULL, Horas FLOAT, PRIMARY KEY(DniEmpleado, NumProy), FOREIGN KEY (DniEmpleado) REFERENCE S Empleado(Dni) ON UPDATE CASCADE ON DELETE CASCADE, FOREIGN KEY (NumProy) REFERENCES Proyecto(NumProyecto) ON UPDATE CASCADE ON DELETE CASCADE);
Query OK, 0 rows affected (1.43 sec)

mysql> DESCRIBE trabaja_en;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| DniEmpleado | varchar(10) | NO | PRI | NULL | |
| NumProy | int(11) | NO | PRI | NULL | |
| Horas | float | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

Inserción de datos:

```
Símbolo del sistema - mysql -u root -p

mysql> INSERT IN Departamento VALUES('Investigación','5','333445555','22-05-1988');
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 'IN Departamen
to VALUES('Investigación','5','333445555','22-05-1988')' at line 1
mysql> INSERT INTO Departamento VALUES('Investigación','5','333445555','22-05-1988');
Query OK, 1 row affected (0.31 sec)

mysql> INSERT INTO Departamento VALUES('Administración','4','987654321','01-01-1995');
Query OK, 1 row affected (0.25 sec)

mysql> INSERT INTO Departamento VALUES('Sede Central','1','888665555','19-06-1981');
Query OK, 1 row affected (0.17 sec)

mysql> SELECT * FROM Departamento;
+-----+-----+-----+-----+
| NombreDpto | NumDpto | DniDirector | FechaIngresoDirector |
+-----+-----+-----+-----+
| Sede Central | 1 | 888665555 | 19-06-1981 |
| Administración | 4 | 987654321 | 01-01-1995 |
| Investigación | 5 | 333445555 | 22-05-1988 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
Símbolo del sistema - mysql -u root -p

mysql> INSERT INTO Localizaciones_Dpto VALUES('1','Madrid');
Query OK, 1 row affected (0.17 sec)

mysql> INSERT INTO Localizaciones_Dpto VALUES('4','Gijón');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO Localizaciones_Dpto VALUES('5','Valencia');
Query OK, 1 row affected (0.17 sec)

mysql> INSERT INTO Localizaciones_Dpto VALUES('5','Sevilla');
Query OK, 1 row affected (0.19 sec)

mysql> INSERT INTO Localizaciones_Dpto VALUES('5','Madrid');
Query OK, 1 row affected (0.17 sec)

mysql> SELECT * FROM Localizaciones_dpto;
+-----+-----+
| NumDpto | UbicacionDpto |
+-----+-----+
| 1 | Madrid |
| 4 | Gijón |
| 5 | Madrid |
| 5 | Sevilla |
| 5 | Valencia |
+-----+-----+
5 rows in set (0.00 sec)

mysql>
```



```
Símbolo del sistema - mysql -u root -p
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Alberto | Campos | Sastre | 333445555 | 08-12-1955 | Avda.Rios, 9 | H | 40000 | 888665555 | 5 |
| Aurora | Oliva | Avenzuela | 453453453 | 31-07-1972 | Antón, 6 | M | 25000 | 333445555 | 5 |
| Fernando | Ojeda | Ordóñez | 666884444 | 15-09-1962 | Portillo, s/n | H | 38000 | 333445555 | 5 |
| Eduardo | Ochoa | Paredes | 888665555 | 10-11-1937 | Las peñas, 1 | H | 55000 | NULL | 1 |
| Juana | Salas | Oreja | 987654321 | 20-06-1941 | Cerquillas, 67 | M | 43000 | 987654321 | 4 |
| Luis | Pajares | Monera | 987987987 | 29-03-1969 | Enebros, 90 | H | 25000 | 987654321 | 4 |
| Alicia | Jiménez | Celaya | 999887777 | 12-05-1968 | Gran Vía, 38 | M | 25000 | 987654321 | 4 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> INSERT INTO Proyecto VALUES('ProductoX','1','Valencia','5');
Query OK, 1 row affected (0.39 sec)

mysql> INSERT INTO Proyecto VALUES('ProductoY','2','Sevilla','5');
Query OK, 1 row affected (0.15 sec)

mysql> INSERT INTO Proyecto VALUES('ProductoZ','3','Madrid','5');
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO Proyecto VALUES('Computación','10','Gijón','4');
Query OK, 1 row affected (0.22 sec)

mysql> INSERT INTO Proyecto VALUES('Reorganización','20','Madrid','1');
Query OK, 1 row affected (0.19 sec)

mysql> INSERT INTO Proyecto VALUES('Comunicaciones','30','Gijón','4');
Query OK, 1 row affected (0.18 sec)

mysql> select * from Proyecto;
+-----+-----+-----+-----+
| NombreProyecto | NumProyecto | UbicacionProyecto | NumDptoProyecto |
+-----+-----+-----+-----+
| ProductoX | 1 | Valencia | 5 |
| ProductoY | 2 | Sevilla | 5 |
| ProductoZ | 3 | Madrid | 5 |
| Computación | 10 | Gijón | 4 |
| Reorganización | 20 | Madrid | 1 |
| Comunicaciones | 30 | Gijón | 4 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>
```

```
Símbolo del sistema - mysql -u root -p
+-----+-----+-----+-----+
| ProductoY | 2 | Sevilla | 5 |
| ProductoZ | 3 | Madrid | 5 |
| Computación | 10 | Gijón | 4 |
| Reorganización | 20 | Madrid | 1 |
| Comunicaciones | 30 | Gijón | 4 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> INSERT INTO Subordinado VALUES('333445555','Alicia','M','05-04-1986','Hija');
Query OK, 1 row affected (0.25 sec)

mysql> INSERT INTO Subordinado VALUES('333445555','Teodoro','H','25-10-1983','Hijo');
Query OK, 1 row affected (0.21 sec)

mysql> INSERT INTO Subordinado VALUES('333445555','Luisa','M','03-10-1958','Esposa');
Query OK, 1 row affected (0.15 sec)

mysql> INSERT INTO Subordinado VALUES('987654321','Alfonso','H','28-02-1942','Esposo');
Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO Subordinado VALUES('123456789','Miguel','H','04-01-1988','Hijo');
Query OK, 1 row affected (0.18 sec)

mysql> INSERT INTO Subordinado VALUES('123456789','Alicia','M','30-12-1988','Hija');
Query OK, 1 row affected (0.23 sec)

mysql> INSERT INTO Subordinado VALUES('123456789','Elisa','M','05-05-1967','Esposa');
Query OK, 1 row affected (0.20 sec)

mysql> select * from Subordinado;
+-----+-----+-----+-----+-----+
| DniEmpleado | NombSubordinado | Sexo | FechaNac | Relacion |
+-----+-----+-----+-----+-----+
| 123456789 | Alicia | M | 30-12-1988 | Hija |
| 123456789 | Elisa | M | 05-05-1967 | Esposa |
| 123456789 | Miguel | H | 04-01-1988 | Hijo |
| 333445555 | Alicia | M | 05-04-1986 | Hija |
| 333445555 | Luisa | M | 03-10-1958 | Esposa |
| 333445555 | Teodoro | H | 25-10-1983 | Hijo |
| 987654321 | Alfonso | H | 28-02-1942 | Esposo |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

```
mysql -u root -p
Query OK, 1 row affected (0.54 sec)

mysql> INSERT INTO trabaja_en VALUES('987654321','20','15.0');
Query OK, 1 row affected (0.19 sec)

mysql> INSERT INTO trabaja_en VALUES('888665555','20');
ERROR 1136 (21501): Column count doesn't match value count at row 1
mysql> INSERT INTO trabaja_en (DniEmpleado, NumProy) VALUES ('888665555','20');
ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`bd_empresa`.`trabaja_en`, CONSTRAINT `trabaja_en_ibfk_1` FOREIGN KEY (`DniEmpleado`) REFERENCES `empleados` (`Dni`) ON DELETE CASCADE ON UPDATE CASCADE)
mysql> INSERT INTO trabaja_en (DniEmpleado, NumProy) VALUES ('888665555','20.0');
ERROR 1265 (01000): Data truncated for column 'NumProy' at row 1
mysql> ;
ERROR:
No query specified

mysql> INSERT INTO trabaja_en (DniEmpleado, NumProy) VALUES ('888665555','20.0');
Query OK, 1 row affected (0.07 sec)

mysql> SELECT * FROM trabaja_en;
+-----+-----+-----+
| DniEmpleado | NumProy | Horas |
+-----+-----+-----+
| 123456789   | 1       | 32.5  |
| 123456789   | 2       | 7.5   |
| 333445555   | 2       | 10    |
| 333445555   | 3       | 10    |
| 333445555   | 10      | 10    |
| 333445555   | 20      | 10    |
| 453453453   | 1       | 20    |
| 453453453   | 2       | 20    |
| 666884444   | 3       | 40    |
| 888665555   | 20      | NULL  |
| 987654321   | 20      | 15    |
| 987654321   | 30      | 20    |
| 987987987   | 10      | 35    |
| 987987987   | 30      | 5     |
| 999887777   | 10      | 10    |
| 999887777   | 30      | 30    |
+-----+-----+-----+
16 rows in set (0.00 sec)

mysql>
```