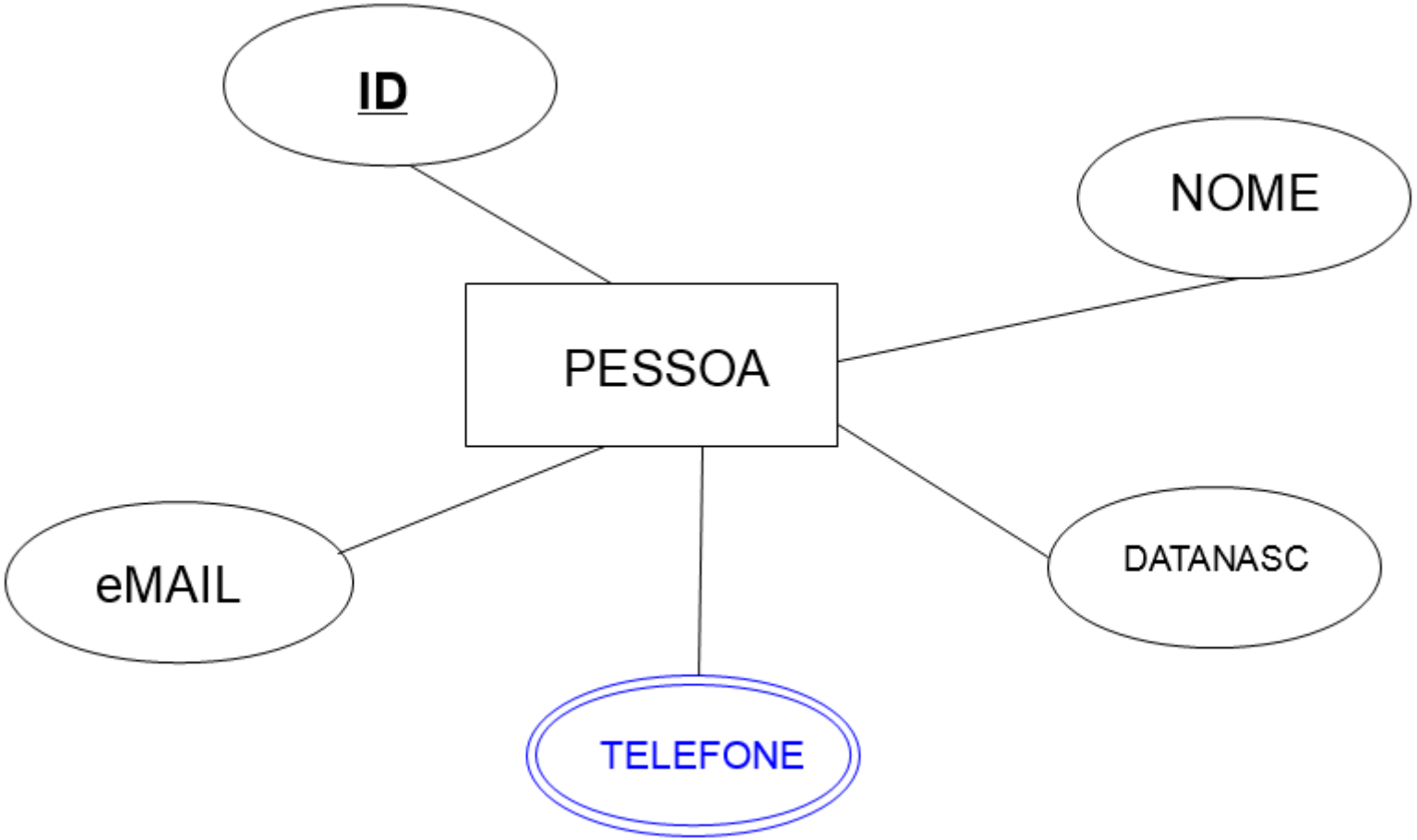
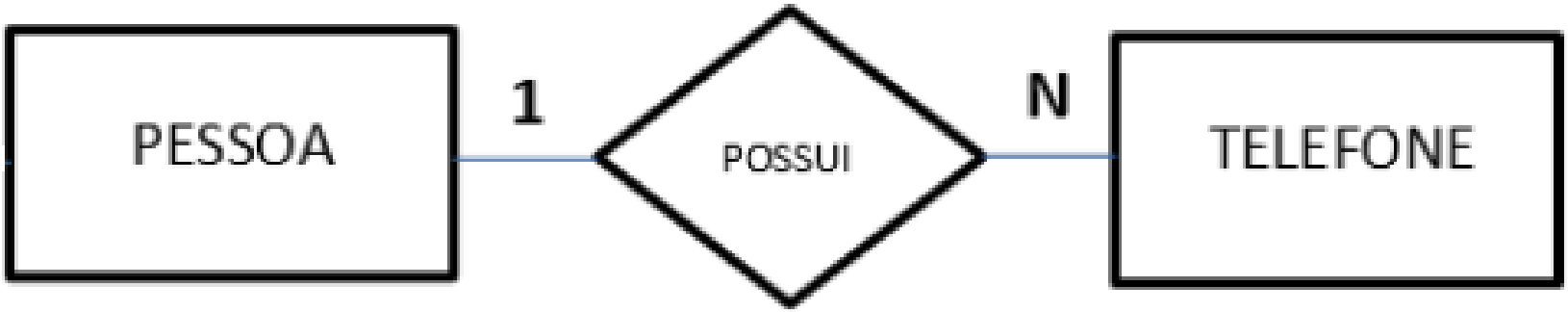
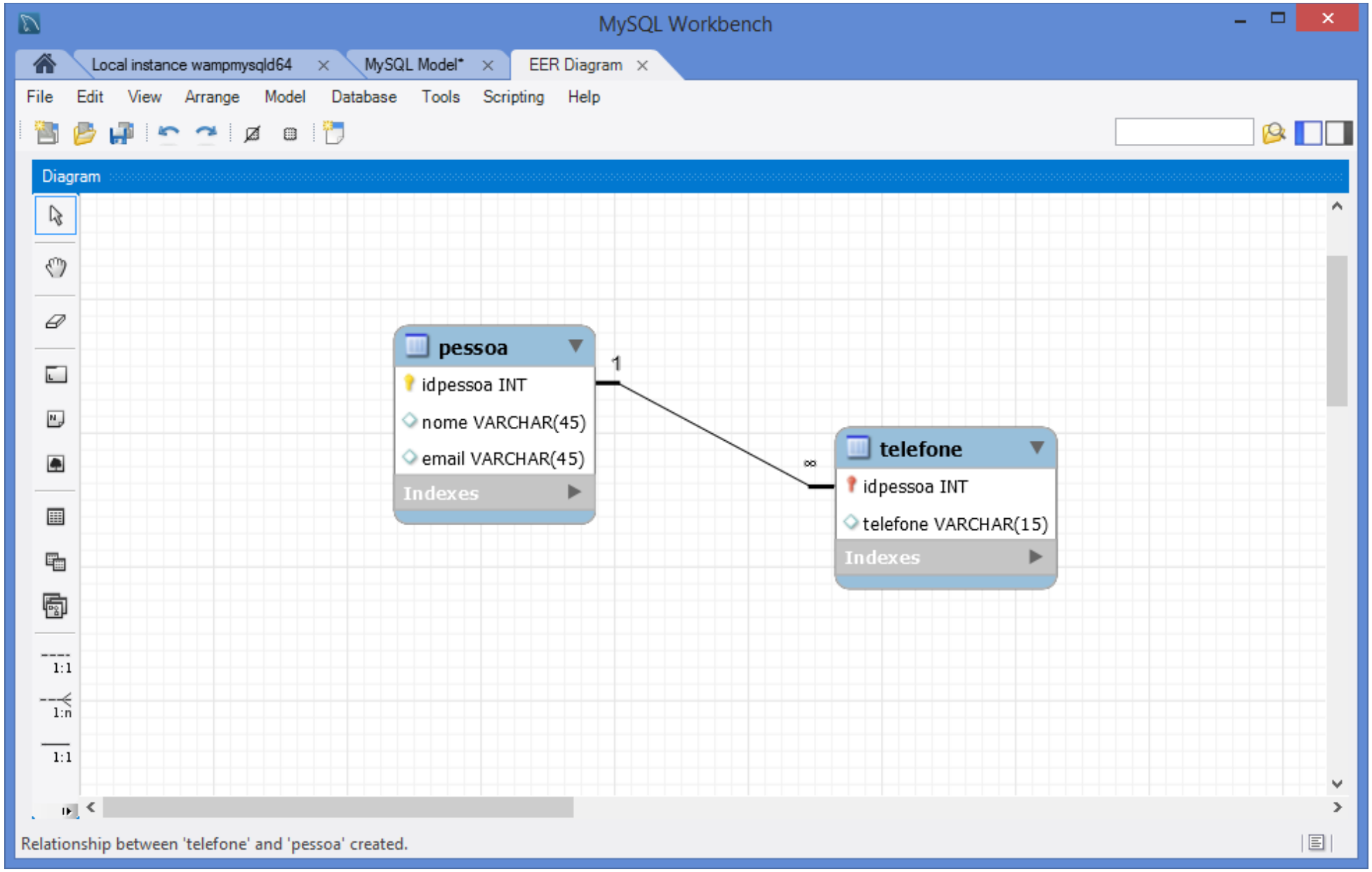
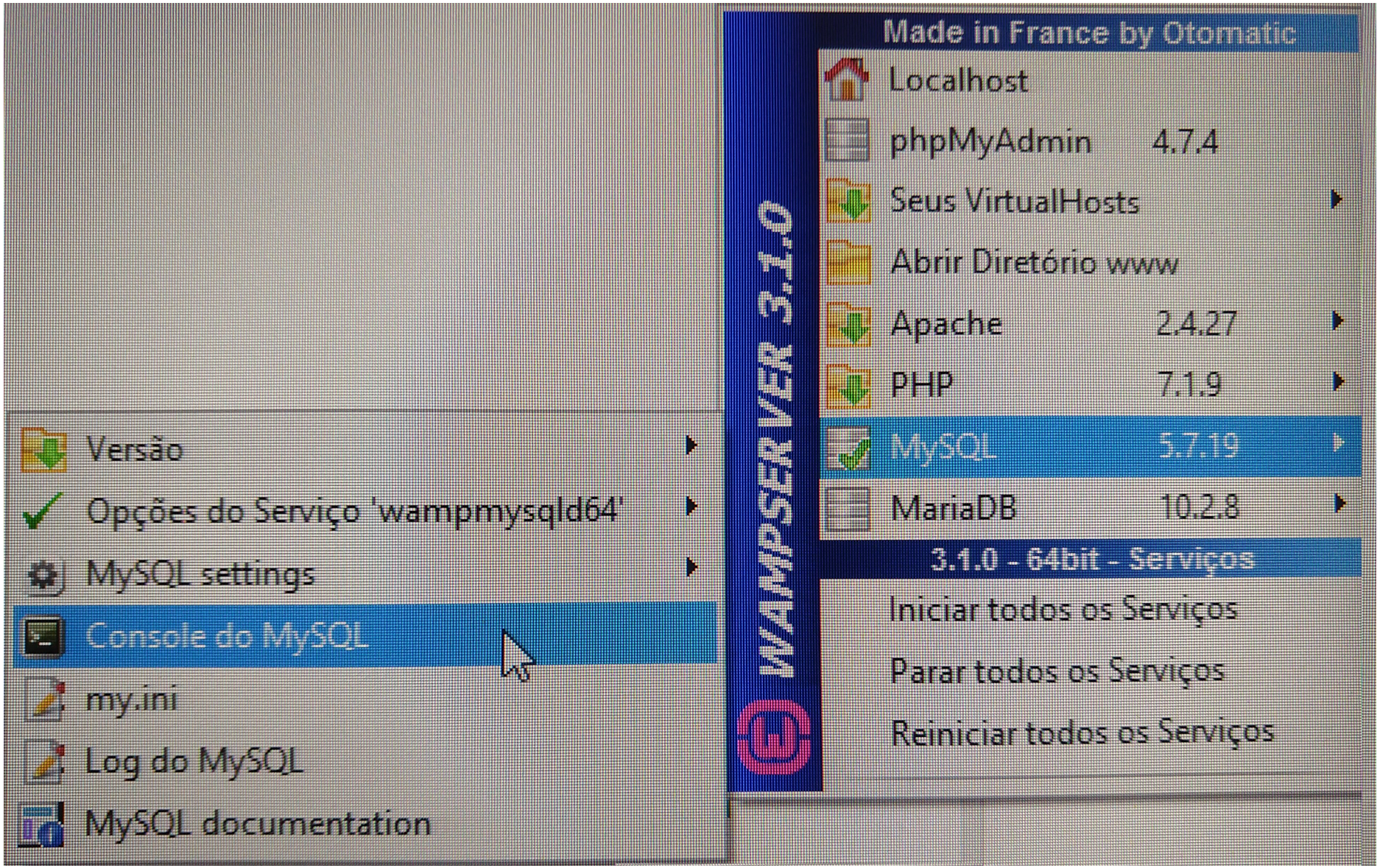
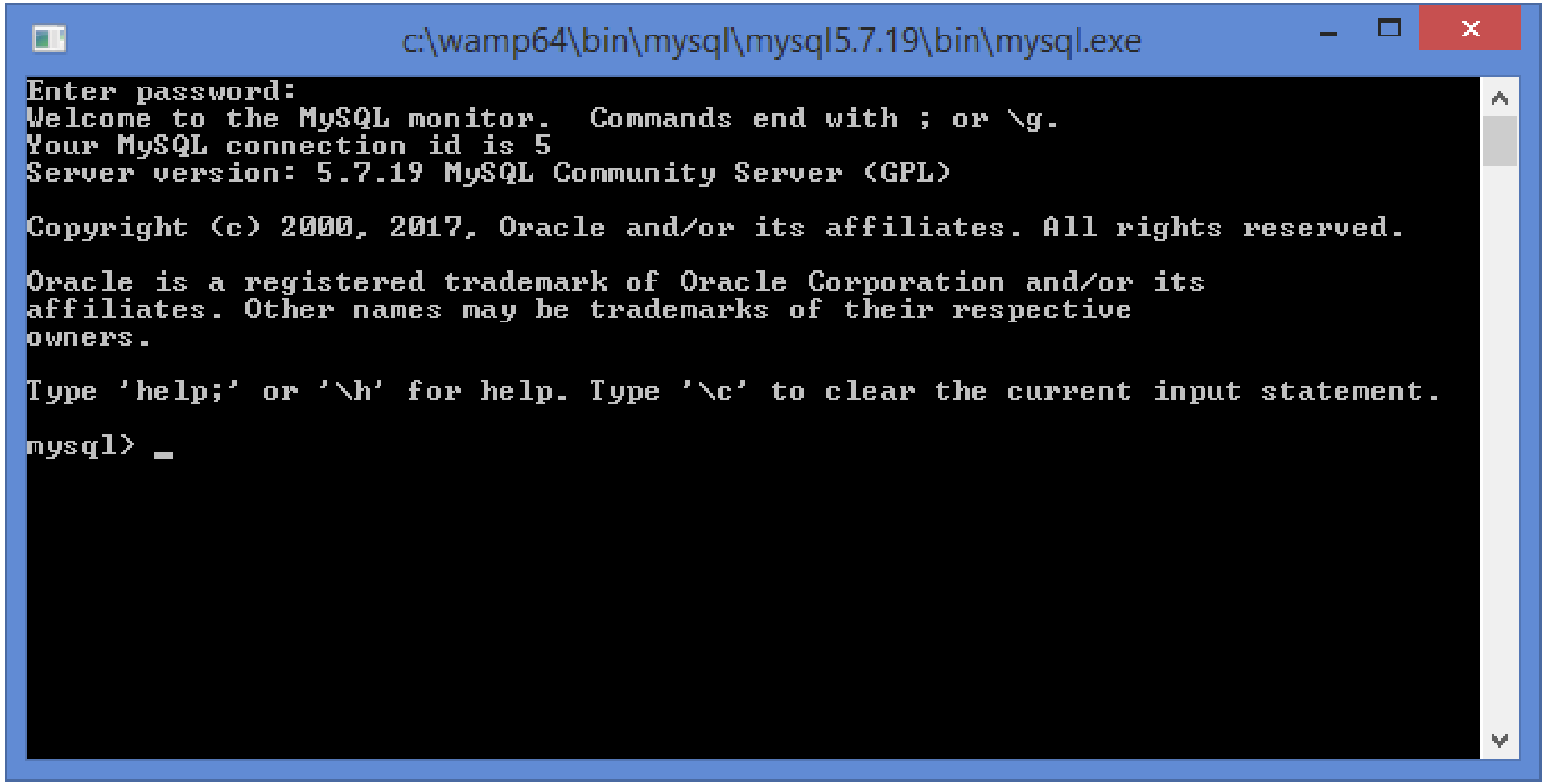
# Cardinalidade 1:N
# Atributo Multivalorado



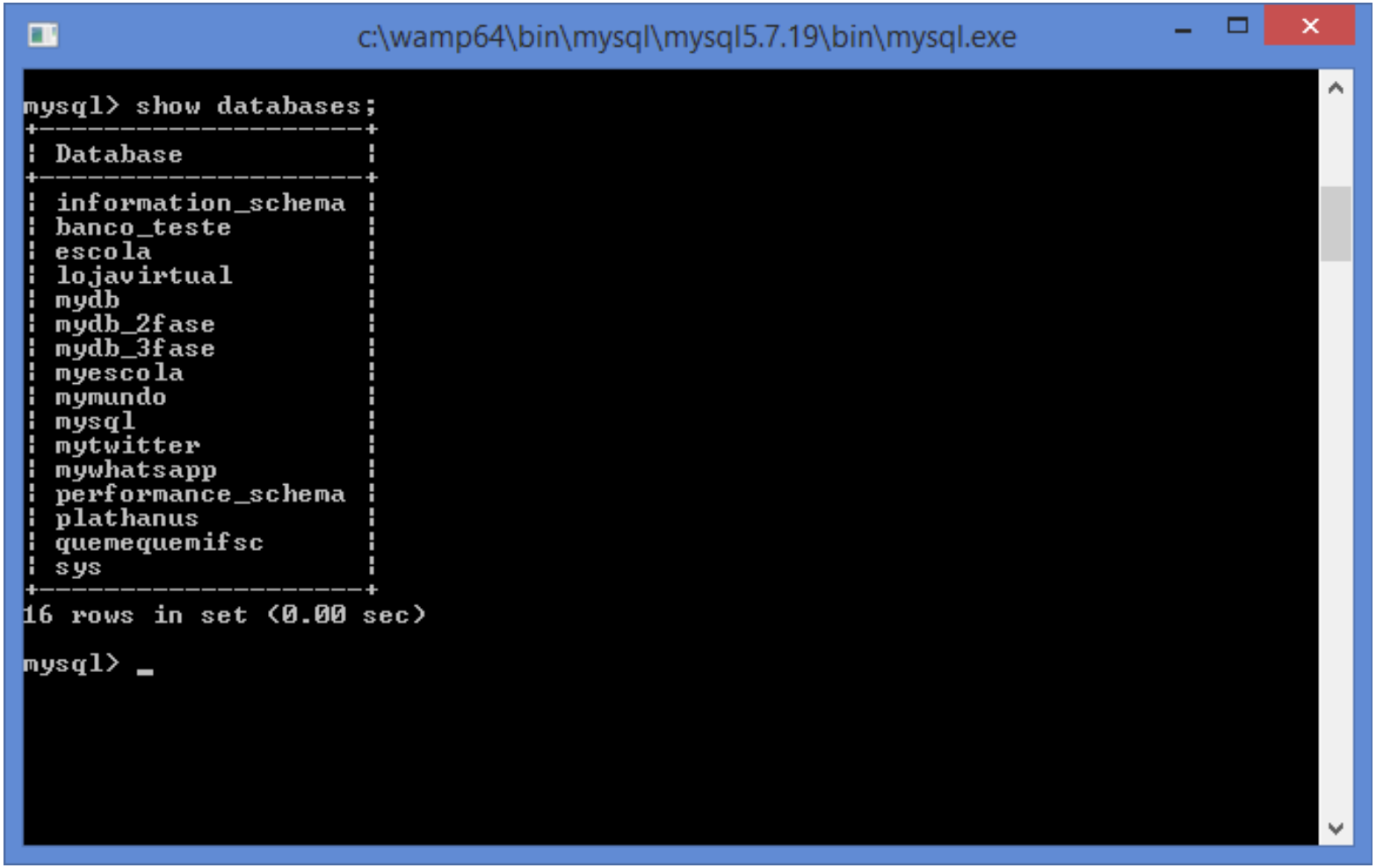

PESSOA
1
POSSUI
N
TELEFONE


MySQL Workbench
Local instance wampmysqld64
MySQL Model*
EER Diagram
File
Edit
View
Arrange
Model
Database
Tools
Scripting
Help
Diagram
pessoa
idpessoa INT
nome VARCHAR(45)
email VARCHAR(45)
Indexes
1
∞
telefone
idpessoa INT
telefone VARCHAR(15)
Indexes
1:1
1:n
1:1
Relationship between 'telefone' and 'pessoa' created.

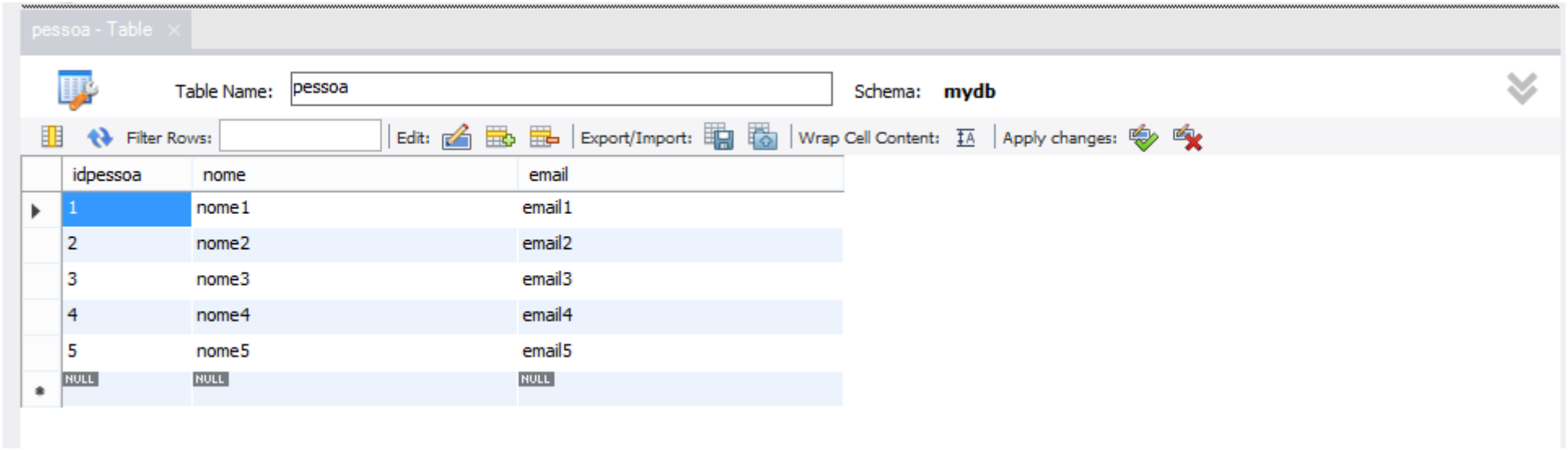

Made in France by Otomatic
WAMPSERVER 3.1.0
Localhost
phpMyAdmin 4.7.4
Seus VirtualHosts
Abrir Diretório www
Apache 2.4.27
PHP 7.1.9
MySQL 5.7.19
MariaDB 10.2.8
3.1.0 - 64bit - Serviços
Iniciar todos os Serviços
Parar todos os Serviços
Reiniciar todos os Serviços
Versão
Opções do Serviço 'wampmysqld64'
MySQL settings
Console do MySQL
my.ini
Log do MySQL
MySQL documentation

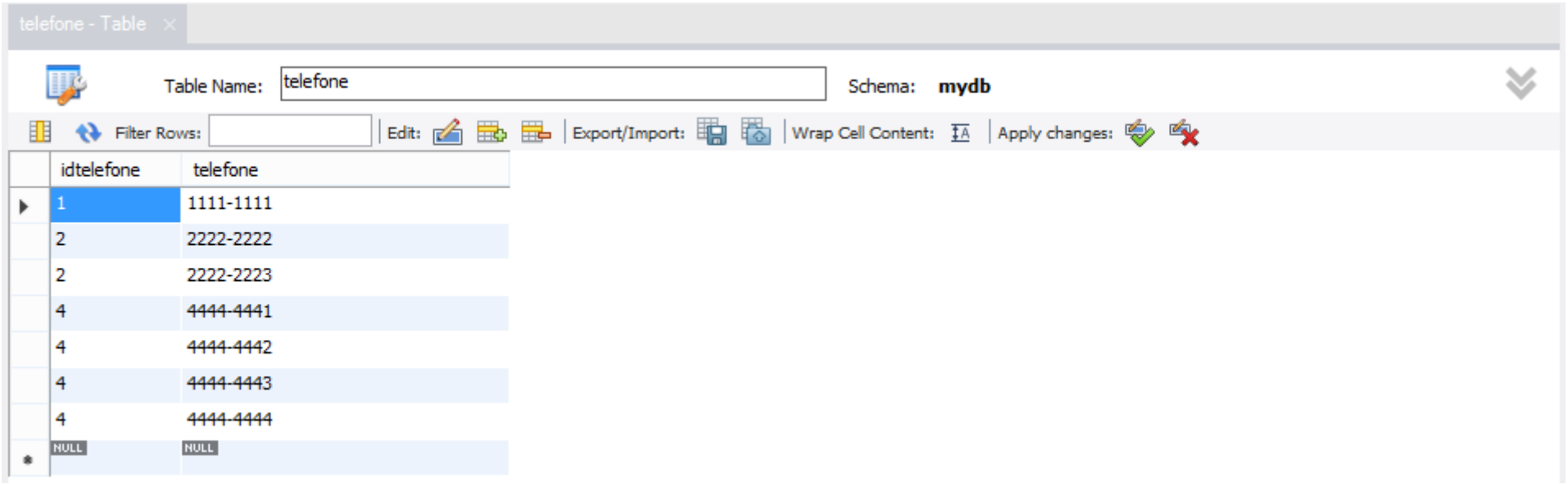

c:\wamp64\bin\mysql\mysql5.7.19\bin\mysql.exe
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 5
Server version: 5.7.19 MySQL Community Server (GPL)
Copyright (c) 2000, 2017, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered 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> **show databases;**



mysql> **use mydb;**
mysql> **show tables;**
mysql> **describe pessoa;**


pessoa - Table
Table Name: pessoa
Schema: mydb
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
Apply changes:
idpessoa nome email
1 nome1 email1
2 nome2 email2
3 nome3 email3
4 nome4 email4
5 nome5 email5
NULL NULL NULL


telefone - Table
Table Name: telefone
Schema: mydb
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
Apply changes:
idtelefone telefone
1 1111-1111
2 2222-2222
2 2222-2223
4 4444-4441
4 4444-4442
4 4444-4443
4 4444-4444
NULL NULL

# The SQL INSERT INTO Statement

The INSERT INTO statement is used to insert new records in a table.

## INSERT INTO Syntax

It is possible to write the INSERT INTO statement in two ways.

The first way specifies both the column names and the values to be inserted:

```
INSERT INTO table_name (column1, column2, column3, ...)
VALUES (value1, value2, value3, ...);
```

If you are adding values for all the columns of the table, you do not need to specify the column names in the SQL query. However, make sure the order of the values is in the same order as the columns in the table. The INSERT INTO syntax would be as follows:

```
INSERT INTO table_name
VALUES (value1, value2, value3, ...);
```

# The SQL UPDATE Statement

The UPDATE statement is used to modify the existing records in a table.

## UPDATE Syntax

```
UPDATE table_name
SET column1 = value1, column2 = value2, ...
WHERE condition;
```

**Note:** Be careful when updating records in a table! Notice the WHERE clause in the UPDATE statement. The WHERE clause specifies which record(s) that should be updated. If you omit the WHERE clause, all records in the table will be updated!

# The SQL DELETE Statement

The DELETE statement is used to delete existing records in a table.

## DELETE Syntax

```
DELETE FROM table_name WHERE condition;
```

**Note:** Be careful when deleting records in a table! Notice the WHERE clause in the DELETE statement. The WHERE clause specifies which record(s) should be deleted. If you omit the WHERE clause, all records in the table will be deleted!

# The SQL WHERE Clause

The WHERE clause is used to filter records.

The WHERE clause is used to extract only those records that fulfill a specified condition.

## WHERE Syntax

```
SELECT column1, column2, ...
FROM table_name
WHERE condition;
```

**Note:** The WHERE clause is not only used in SELECT statement, it is also used in UPDATE, DELETE statement, etc.!

# CASOS DE USO

1. Listar todos os dados da tabela pessoa
2. Listar nome e e-mail em ordem descendente de e-mail
3. Listar nome e telefone das pessoas que tem telefone
4. Listar nome e telefone de todas as pessoas
5. Listar nome das pessoas que não tem telefone
6. Alterar o nome das pessoas para os colegas de classe
7. Listar nome das pessoas que não tem telefone em ordem descendente (nome)
8. Listar nome e email das pessoas que não tem telefone
9. Acrescentar o prefixo (48) e o algarismo 9 aos telefones
10. Deletar as pessoas que não tem telefone