

# Lab: Database Basics MySQL Queries

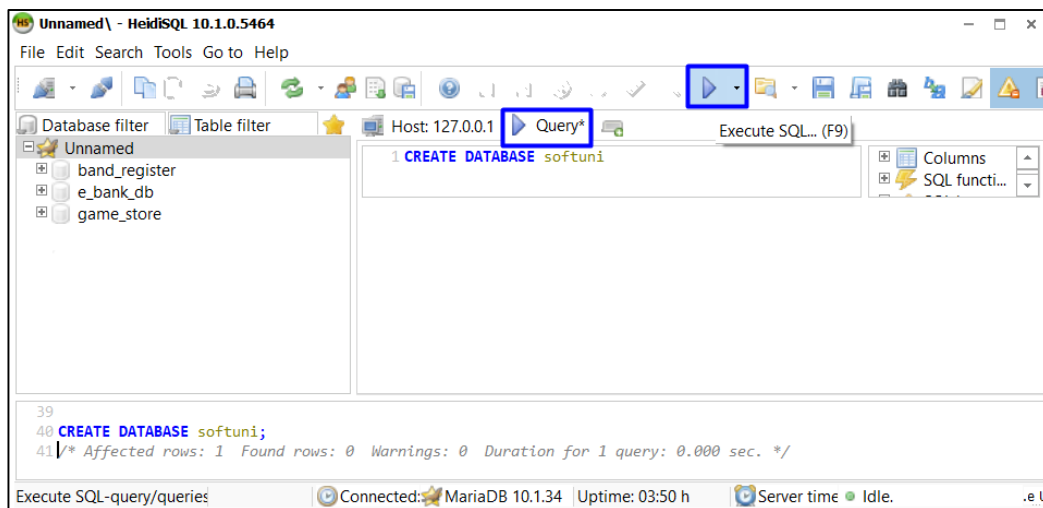
Problems for exercises and homework for the ["Programming Fundamentals" course @ SoftUni](#).

Submit your solutions (source code) of all below described problems in the [Judge](#).

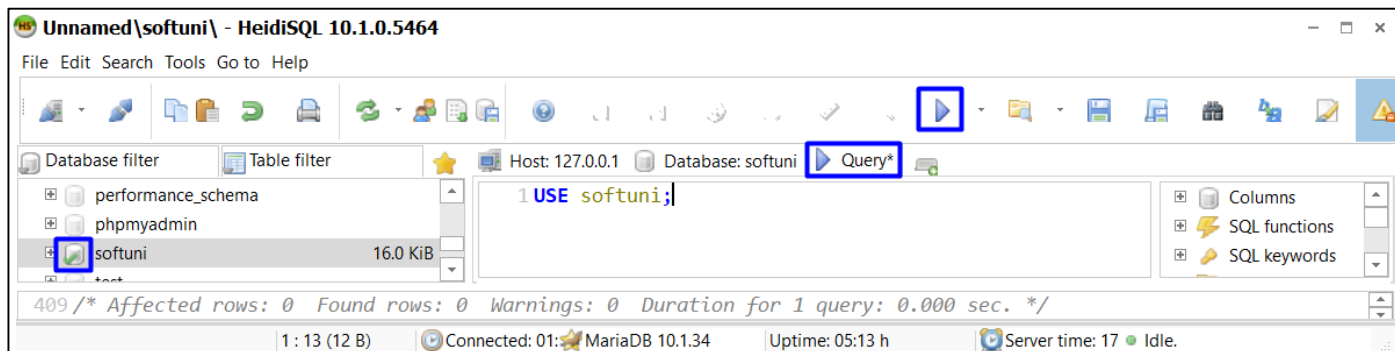
## 0. Create New Database

First start **HeidiSQL**. Then write a query that will create the **"softuni"** database.

Queries are written in the "Query" tab:



When we create a database, we specify the database we want to use. This is done by using the **"USE"** clause:



## 1. Create Table

Submit your solutions in **JUDGE** without the **"USE {database name}"** row:

Using **HeidiSQL** in database **"softuni"** create table **"students"**. You should specify five columns:

- Name: **id**, Datatype: **INT**, **Autoincrement**, **Primary Key**
- Name: **first\_name**, Datatype: **VARCHAR**, Max Length: **50**, Allow **NULL**: true
- Name: **last\_name**, Datatype: **VARCHAR**, Max Length: **50**, Allow **NULL**: true
- Name: **age**, Datatype: **INT**, Allow **NULL**: true
- Name: **grade**, Datatype: **DOUBLE**, Allow **NULL**: true

## 2. Insert Data

Insert 6 recordings in the "**students**" table.

### Example

Id	first_name	last_name	age	grade
1	Guy	Gilbert	15	4.5
2	Kevin	Brown	17	5.4
3	Roberto	Tamburello	19	6
4	Linda	Smith	18	5
5	John	Stones	16	4.25
6	Nicole	Nelson	17	5.50

## 3. Find All Records

Write a query to find all records.

## 4. Find Last Name, Age and Grade

Write a query to find the last name, age, and grade of each student.

last_name	age	grade
Gilbert	15	4.5
Brown	17	5.4
Tamburello	19	6
Smith	18	5
Stones	16	4.25
Nelson	17	5.50

## 5. Find First 5 Records

Write a query to find the first 5 records.

Id	first_name	last_name	age	grade
1	Guy	Gilbert	15	4.5
2	Kevin	Brown	17	5.4
3	Roberto	Tamburello	19	6
4	Linda	Smith	18	5
5	John	Stones	16	4.25

## 6. Find First 5 Last Name and Grade

Write a query to find the top 5 records. Select only last name and grade.

last_name	grade
Gilbert	4.5
Brown	5.4
Tamburello	6
Smith	5
Stones	4.25

## 7. Truncate Table

Remove all records in "**students**" table.

## 8. Drop Table

Drop table "**students**".

## 9. Drop Database

Drop database "**softuni**".