

1. Выведите имя, фамилию персонажей и название книги, которая на них числится

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with the 'myhogwarts' database selected, showing tables 'characters' and 'library'. The 'library' table structure is detailed below:

Table: library

Columns:

- lib_id: int(11) AI PK
- char_id: int(11)
- book_name: varchar(45)
- start_date: date
- end_date: date
- book_id: int(11)

The central query editor shows the following SQL query:

```
1 select characters.fname, characters.lname, library.book_name
2 from characters
3 join library
4 on characters.char_id=library.char_id;
5
```

The 'Result Grid' at the bottom displays the query results:

	fname	lname	book_name
▶	Harry	Potter	Magical Water Plants Of The Highland Rocks
	Hermione	Granger	A History Of Magic
	Ron	Weasley	Advanced Potion-Making
	Draco	Malfoy	Fantastic Beasts And Where To Find Them
	Vincent	Crabbe	Fantastic Beasts And Where To Find Them
	Gregory	Goyle	Hogwarts: A History
	Albus	Dumbledore	Quidditch Through The Ages
	Luna	Lovegood	Quidditch Through The Ages
	Cedric	Diggory	The Lockhart Collection
	Severus	Snape	Moste Potente Potions
	Lord	Voldemort	The Life And Lies Of Albus Dumbledore

The right sidebar contains the 'SQLAdditions' panel with 'My Snippets' and a vertical toolbar with icons for 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'.

2. Выведите имя, фамилию персонажей и название книги, вне зависимости от того, есть ли у них книги или нет.

The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left displays the 'myhogwarts' database with tables 'characters' and 'library'. The 'Table: library' section shows columns: lib_id (int(11) AI PK), char_id (int(11)), book_name (varchar(45)), start_date (date), end_date (date), and book_id (int(11)).

The SQL editor contains the following query:

```
1 • select characters.fname, characters.lname, library.book_name
2 from characters
3 left join library ON characters.char_id = library.char_id;
4
5
```

The 'Result Grid' shows 13 rows of data:

	fname	lname	book_name
▶	Harry	Potter	Magical Water Plants Of The Highland Rocks
	Hermione	Granger	A History Of Magic
	Ron	Weasley	Advanced Potion-Making
	Draco	Malfoy	Fantastic Beasts And Where To Find Them
	Vincent	Crabbe	Fantastic Beasts And Where To Find Them
	Gregory	Goyle	Hogwarts: A History
	Albus	Dumbledore	Quidditch Through The Ages
	Luna	Lovegood	Quidditch Through The Ages
	Cedric	Diggory	The Lockhart Collection
	Severus	Snape	Moste Potente Potions
	Lord	Voldemort	The Life And Lies Of Albus Dumbledore

The 'Output' pane at the bottom shows the execution message: 'select characters.fname, characters.lname, library.book_name from characters right join library ON characters.c... 13 row(s) returned' with a duration of 0.000 sec / 0.000 sec.

3. Выведите название книги и имя патронуса, вне зависимости от того, есть ли информация о держателе книги в таблице или нет.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'myhogwarts' selected, showing tables 'characters' and 'library'. The 'library' table structure is detailed in the bottom-left pane. The central pane shows a SQL query in 'Query 1':

```
1 select characters.patronus, library.book_name
2 from characters
3 right join library ON characters.char_id = library.char_id;
4
```

The 'Result Grid' below the query displays the results of the query. The first row is highlighted in blue.

patronus	book_name
NULL	Hogwarts: A History
Phoenix	Quidditch Through The Ages
Unknown	The Lockhart Collection
Doe	Moste Potente Potions
NULL	The Life And Lies Of Albus Dumbledore
NULL	Fantastic Beasts And Where To Find Them
NULL	The Tales Of Beadle The Bard
Jack Russell terrier	Advanced Potion-Making
Otter	A History Of Magic
Stag	Magical Water Plants Of The Highland Rocks
Hare	Quidditch Through The Ages
NULL	Magical Water Plants Of The Highland Rocks
NULL	Fantastic Beasts And Where To Find Them

The bottom pane shows the 'Output' tab with 'Action Output' selected, displaying the execution message: '118 03:15:39 select characters.patronus, library.book_name from characters left join library ON characters.char_id = library.c... 11 row(s) returned 0.000 sec / 0.000 sec'.

4. Выведите имя, фамилию, возраст персонажей и название книги, которая на них числится, при условии, что все владельцы книг должны быть старше 15 лет

The screenshot shows the MySQL Workbench interface. The 'SCHEMAS' panel on the left displays the 'myhogwarts' database structure, including tables 'characters' and 'library'. The 'Query' editor in the center contains the following SQL query:

```
1 • SELECT characters.fname, characters.lname, characters.age, library.book_name
2 FROM characters
3 JOIN library ON characters.char_id = library.char_id where characters.age>15;
4
5
6
```

Below the query editor, the 'Result Grid' shows the results of the query:

	fname	lname	age	book_name
▶	Albus	Dumbledore	111	Quidditch Through The Ages
	Severus	Snape	55	Moste Potente Potions

The 'Table: library' information panel on the bottom left shows the following columns and data types:

- lib_id: int(11) AI PK
- char_id: int(11)
- book_name: varchar(45)
- start_date: date
- end_date: date
- book_id: int(11)

The bottom status bar indicates 'Result 19' and 'Read Only'.

5. Выведите имя персонажа, название книги, дату выдачи и дату завершения, при условии, что он младше 15 лет и его патронус неизвестен

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'myhogwarts' expanded, showing tables 'characters' and 'library'. The 'library' table is selected, and its columns are listed: lib_id, char_id, book_name, start_date, end_date, and book_id. The main editor shows a SQL query:

```
1 • SELECT characters.fname, library.book_name, library.start_date, library.end_date
2 FROM characters
3 JOIN library ON characters.char_id = library.char_id where characters.age<15 and patronus="Unknown";
4
5
6
```

The 'Result Grid' shows the following data:

fname	book_name	start_date	end_date
Cedric	The Lockhart Collection	2015-12-20	2030-12-20

The bottom status bar indicates 'Read Only' and 'Context Help'.

6. Используя вложенный запрос вывести количество книг, у которых end_date больше, чем end_date у Hermione

The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left displays the 'myhogwarts' database with tables 'characters' and 'library'. The 'library' table structure is detailed in the 'Table: library' section, showing columns: lib_id (int(11) AI PK), char_id (int(11)), book_name (varchar(45)), start_date (date), end_date (date), and book_id (int(11)).

The central 'Query Editor' contains the following SQL query:

```
1 • select count(book_id) from library where end_date > (select end_date from library where char_id=2);
```

The 'Result Grid' at the bottom shows the query result:

count(book_id)
2

The right sidebar contains 'SQLAdditions' with 'My Snippets' and a vertical toolbar with icons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query Stats'.

7. С помощью вложенного запроса выведите имена всех патронусов, у которых владельцы старше возраста персонажа, у которого патронус Unknown

The screenshot shows the MySQL Workbench interface. The main window displays a SQL query in the 'Query 1' tab:

```
1 • select patronus from characters where age > (select age from characters where patronus="Unknown");
```

The query results are shown in the 'Result Grid' tab, displaying the following data:

patronus
Phoenix
Doe

The left sidebar shows the 'SCHEMAS' tree with the 'myhogwarts' database selected. The 'library' table is highlighted under the 'Characters' section. The bottom status bar indicates 'characters 4 x' and 'Read Only'.