

1. Выведите имя, фамилию, патронуса всех персонажей, у которых есть patronus или он известен

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'myhogwarts' expanded, showing 'characters' and 'library' tables. The main editor window shows a SQL query in 'Query 1':

```
1 • use myhogwarts;
2 • select fname, lname, patronus from characters where not patronus="Unknown" and patronus is not null;
3
4 ✖ Если использую "OR", то Unknown отражается в таблице, как подходящий под запрос "is not null".
5 Чтобы отразить "у которых есть patronus или он известен", в данном случае показательно "AND"
6
```

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

fname	lname	patronus
Harry	Potter	Stag
Hermione	Granger	Otter
Ron	Weasley	Jack Russell terrier
Albus	Dumbledore	Phoenix
Luna	Lovegood	Hare
Severus	Snape	Doe

The bottom status bar indicates 'characters 6' and 'Read Only'.

2. Выведите фамилию персонажей, у которых последняя буква в фамилии 'е'

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

```
1 use myhogwarts;  
2 select lname from characters where lname like "%e";  
3  
4  
5
```

The 'Result Grid' tab is active, showing the following results:

lname
Crabbe
Goyle
Dumbledore
Snape

The left sidebar shows the 'SCHEMAS' panel with a tree view of the 'myhogwarts' database, including tables like 'characters', 'library', 'Views', 'Stored Procedures', and 'Functions'. The bottom status bar indicates 'characters 7 x' and 'Read Only'.

### 3. Посчитайте общий возраст всех персонажей и выведите это на экран

The screenshot displays the MySQL Workbench interface. The central query editor shows the SQL statement: `select sum(age) from characters;`. Below the editor, the 'Result Grid' tab is active, showing a single row with the value 257 for the column `sum(age)`. The left sidebar contains a 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The bottom pane shows 'Object Info' for the 'name' column, indicating its collation and definition. The right sidebar contains a 'SQLAdditions' pane with a message about automatic context help.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Administration Schemas

Information

Column: **name**

Collation: utf8mb4\_0900\_ai\_ci

Definition: name varchar(45)

Query 1 x SQL File 8\*

Limit to 1000 rows

1 • `select sum(age) from characters;`

Result Grid

sum(age)
257

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result 23 x

Read Only Context Help Snippets

Output

Action Output

# Time Action Messages Duration / Fetch

#### 4. Выведите имя, фамилию и возраст персонажей по убыванию их возраста

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL statement:

```
1 • select fname, lname, age from characters order by age desc;
```

The results are displayed in the Result Grid, sorted by age in descending order:

	fname	lname	age
▶	Albus	Dumbledore	111
	Severus	Snape	55
	Cedric	Diggory	14
	Harry	Potter	11
	Hermione	Granger	11
	Ron	Weasley	11
	Draco	Malfoy	11
	Vincent	Crabbe	11
	Gregory	Goyle	11
	Luna	Lovegood	11
	Lord	Voldemort	NULL

The left sidebar shows the Navigator pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The bottom left pane shows the column information for 'lname':

- Column: lname
- Collation: utf8mb4\_0900\_ai\_ci
- Definition: lname varchar(45)

The right pane shows the SQLAdditions toolbar and a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

5. Выведите имя персонажа и возраст, у которых последний находится в диапазоне от 50 до 100 лет

The screenshot shows the MySQL Workbench interface. The main window displays a query in the SQL editor:

```
1 • select fname, age from characters where age between 50 and 100;
```

The query results are shown in the Result Grid below the editor:

	fname	age
▶	Severus	55

The left sidebar contains the Navigator pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The bottom left pane shows the Information tab with details for the column 'lname':

- Column: lname
- Collation: utf8mb4\_0900\_ai\_ci
- Definition: lname varchar(45)

The right sidebar contains the SQLAdditions pane with a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

The bottom status bar shows the current file is 'characters 26', and the bottom right pane shows the Output tab with 'Action Output' selected.

6. Выведите возраст всех персонажей так, чтобы среди них не было тех, у кого он одинаковый

The screenshot shows the MySQL Workbench interface. The main window displays a query editor with the following SQL statement:

```
1 • select distinct age from characters;
```

The query is executed, and the results are shown in the 'Result Grid' tab. The results are as follows:

age
11
111
14
55
NULL

The left sidebar contains the 'Navigator' pane with the following sections:

- MANAGEMENT**
  - Server Status
  - Client Connections
  - Users and Privileges
  - Status and System Variables
  - Data Export
  - Data Import/Restore
- INSTANCE**
  - Startup / Shutdown
  - Server Logs
  - Options File
- PERFORMANCE**
  - Dashboard
  - Performance Reports
  - Performance Schema Setup

The bottom of the interface shows the 'Output' pane with the 'Action Output' tab selected.

7. Выведите всю информацию о персонажах, у которых faculty = Gryffindor и чей возраст больше 30 лет

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL statement:

```
1 • select * from characters where faculty = "Gryffindor" and age>30;
```

The query was executed, but an error occurred. The error message in the Output pane is:

```
Error Code: 1054 'Unknown column 'Gryffindor' in 'where clause'
```

The error message indicates that the column name 'Gryffindor' is not recognized in the 'where' clause. This is likely due to the use of double quotes around the name, which MySQL interprets as a string literal rather than a column identifier. The correct syntax would be to use single quotes or no quotes at all for column names.

The Output pane also shows the following information:

#	Time	Action	Message	Duration / Fetch
58	01:37:10	select * from characters where faculty = Gryffindor and age>30 LIMIT 0 1000	Error Code: 1054 'Unknown column 'Gryffindor' in 'where clause'	0.000 sec

8. Выведите имена первых трех факультетов из таблицы, так чтобы факультеты не повторялись

The screenshot shows the MySQL Workbench interface. The main window displays a query in the SQL editor:

```
1 • select distinct faculty from characters limit 3;
```

The query results are shown in the Result Grid below the editor:

faculty
Gryffindor
Slytherin
Ravendaw

The left sidebar contains the Navigator pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The bottom status bar shows the current table is 'characters 30' and the view is 'Read Only'.

SQLAdditions pane on the right displays a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."



9. Выведите имена всех персонажей, у которых имя начинается с 'H' и состоит из 5 букв, или чье имя начинается с 'L'

The screenshot shows the MySQL Workbench interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The left sidebar contains a Navigator pane with sections for MANAGEMENT (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), INSTANCE (Startup / Shutdown, Server Logs, Options File), and PERFORMANCE (Dashboard, Performance Reports, Performance Schema Setup). Below the Navigator is the Administration pane with tabs for Administration and Schemas, and an Information pane showing details for the 'name' column: Column: name, Collation: utf8mb4\_0900\_ai\_ci, Definition: name varchar(45).

The central SQL Editor pane shows a query: `select fname from characters where fname like "H____" or fname like "L%";`. Below the editor is a toolbar with buttons for Result Grid, Filter Rows, Export, and Wrap Cell Content. The Results pane at the bottom displays a table with the following data:

fname
Harry
Luna
Lord

The right sidebar contains the SQLAdditions pane with a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." Below this are buttons for Form Editor, Field Types, Query Stats, and Execution Plan. The bottom status bar shows "characters 35", "Read Only", "Context Help", and "Snippets".

## 10. Посчитайте средний возраст всех персонажей

The screenshot shows the MySQL Workbench interface. The main query editor contains the following SQL statement:

```
1 • select AVG(age) from characters;
```

The query results are displayed in the 'Result Grid' tab, showing a single row with the value 25.7000.

AVG(age)
25.7000

The left sidebar shows the 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The 'Administration' tab is selected, showing the 'Information' section with details for the column 'lname':

- Column: lname
- Collation: utf8mb4\_0900\_ai\_ci
- Definition: lname varchar(45)

The right sidebar shows the 'SQLAdditions' pane with a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

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

## 11. Удалите персонажа с ID = 11

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'MANAGEMENT' section with options like Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, and Data Import/Restore. Below this is the 'INSTANCE' section with Startup / Shutdown, Server Logs, and Options File. The 'PERFORMANCE' section includes Dashboard, Performance Reports, and Performance Schema Setup. The 'Administration' tab is selected, showing 'Schemas' and 'Information' sections. The 'Information' section displays details for the 'lname' column: Collation: utf8mb4\_0900\_ai\_ci and Definition: lname varchar(45).

The main query editor shows a SQL query with two statements:

```
1 • delete from characters where char_id= 11;  
2 • select * from characters;
```

The 'Result Grid' tab is active, displaying the results of the second query. The grid shows 10 rows of character data. The first row is highlighted. The columns are: char\_id, fname, lname, age, faculty, patronus, and book\_id.

char_id	fname	lname	age	faculty	patronus	book_id
1	Harry	Potter	11	Gryffindor	Stag	10
2	Hermione	Granger	11	Gryffindor	Otter	9
3	Ron	Weasley	11	Gryffindor	Jack Russell terrier	8
4	Draco	Malfoy	11	Slytherin	NULL	6
5	Vincent	Crabbe	11	Slytherin	NULL	6
6	Gregory	Goyle	11	Slytherin	NULL	1
7	Albus	Dumbledore	111	Gryffindor	Phoenix	2
8	Luna	Lovegood	11	Ravendaw	Hare	2
9	Cedric	Diggory	14	Hufflepuff	Unknown	3
10	Severus	Snape	55	Slytherin	Doe	4
NULL	NULL	NULL	NULL	NULL	NULL	NULL

The bottom status bar shows 'characters 37' and buttons for 'Apply', 'Revert', 'Context Help', and 'Snippets'.

12. Выведите фамилию всех персонажей, которые содержат в ней букву 'а'

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'MANAGEMENT' and 'INSTANCE' sections. The main window displays a query in the 'Query Editor' and its results in the 'Result Grid'.

**Query:**

```
1 • select lname from characters where lname like "%a%";
```

**Result Grid:**

lname
Granger
Weasley
Malfoy
Crabbe
Snape

The bottom status bar shows 'characters 38 x' and 'Read Only'.

13. Используйте псевдоним для того, чтобы временно заменить название столбца fname на Half-Blood Prince для реального принца-полукровки

The screenshot shows the MySQL Workbench interface. The 'Query 1' tab is active, displaying the following SQL code:

```
1 • use myhogwarts;  
2 • select fname as "Half-Blood Prince" from characters where fname="Severus";
```

The 'Result Grid' is visible, showing the results of the query:

Half-Blood Prince
Severus

The 'Navigator' on the left shows the database structure, including the 'myhogwarts' database and its tables. The 'Table: library' is selected, showing its columns and data types.

The 'Output' panel at the bottom shows the 'Action Output' for the query execution.

14. Выведите id и имена всех патронусов в алфавитном порядке, при условии что они есть или ИЗВЕСТНЫ

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'myhogwarts' expanded, showing tables 'characters' and 'library'. The main editor window contains a SQL query in 'Query 1':

```
1 • use myhogwarts;  
2 • select char_id, patronus from characters where not patronus="Unknown" and patronus is not null order by patronus;  
3  
4  
5
```

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

char_id	patronus
10	Doe
8	Hare
3	Jack Russell terrier
2	Otter
7	Phoenix
1	Stag
* NULL	NULL

The bottom status bar indicates 'characters 11' and includes buttons for 'Apply', 'Context Help', and 'Snippets'.

15. Используя оператор IN, выведите имя и фамилию тех персонажей, у которых фамилия Crabbe, Granger или Diggory

The screenshot shows the MySQL Workbench interface with a query executed. The query is: `select fname, lname from characters where lname in ('Crabbe', 'Granger', 'Diggory');`. The result is displayed in a table with two columns: `fname` and `lname`. The table contains three rows: `Hermione Granger`, `Vincent Crabbe`, and `Cedric Diggory`. The `Vincent Crabbe` row is highlighted. The interface also shows the left sidebar with navigation options like **MANAGEMENT**, **INSTANCE**, and **PERFORMANCE**. The bottom status bar indicates the connection details for 'Local instance MySQL80'.

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator: MANAGEMENT

- Server Status
- Client Connections
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INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Administration Schemas

Information

Connection:

Name: Local instance MySQL80  
Host: localhost  
Port: 3306  
Server: MySQL Community  
Server - GPL  
Version: 8.0.15  
Connector: C++ 8.0.15  
Login User: root  
Current User: root@localhost  
SSL: Disabled

Query 1 x SQL File 8\*

Limit to 1000 rows

1 • `select fname, lname from characters where lname in ('Crabbe', 'Granger', 'Diggory');`

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

fname	lname
Hermione	Granger
Vincent	Crabbe
Cedric	Diggory

characters 50 x

Read Only Context Help Snippets

Output

## 16. Выведите минимальный возраст персонажа

The screenshot shows the MySQL Workbench interface with the following components:

- Navigator:** Contains sections for MANAGEMENT (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), INSTANCE (Startup / Shutdown, Server Logs, Options File), and PERFORMANCE (Dashboard, Performance Reports, Performance Schema Setup).
- Administration:** Includes tabs for Administration and Schemas.
- Information:** Displays connection details:
  - Connection:
  - Name: Local instance MySQL80
  - Host: localhost
  - Port: 3306
  - Server: MySQL Community
  - Server - GPL
  - Version: 8.0.15
  - Connector: C++ 8.0.15
  - Login User: root
  - Current User: root@localhost
  - SSL: Disabled
- Query Editor:** Shows a query: `select min(age) from characters;`
- Result Grid:** Displays the query result in a table:

min(age)
11
- SQLAdditions:** Contains a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."
- Bottom Panel:** Includes tabs for Result 51, Read Only, Context Help, and Snippets.



17. Используя оператор [UNION](#) выберите имена из таблицы characters и названия книг из таблицы library

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 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 SQL editor shows a query attempt:

```
1 • select characters.fname, library.book_name
2 from characters
3 join library on characters.char_id = library.char_id;
4
5 -- Применение UNION невозможно. Не выполняются необходимые правила к содержанию таблиц.
6
```

The 'Result Grid' at the bottom displays the following data:

fname	book_name
Harry	Magical Water Plants Of The Highland Rocks
Hermione	A History Of Magic
Ron	Advanced Potion-Making
Draco	Fantastic Beasts And Where To Find Them
Vincent	Fantastic Beasts And Where To Find Them
Gregory	Hogwarts: A History
Albus	Quidditch Through The Ages
Luna	Quidditch Through The Ages
Cedric	The Lockhart Collection
Severus	Moste Potente Potions
Lord	The Life And Lies Of Albus Dumbledore

18. Используя оператор HAVING посчитайте количество персонажей на каждом факультете, оставив только те факультеты, где количество студентов больше 1

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'myhogwarts' expanded, showing tables 'characters' and 'library'. The 'characters' table columns are listed: lib\_id, char\_id, book\_name, start\_date, end\_date, and book\_id. The main editor window contains the following SQL query:

```
1 use myhogwarts;
2 select count(char_id), faculty from characters group by faculty having count(char_id) > 1;
3
4
5
```

Below the query editor, the 'Result Grid' is displayed with the following data:

count(char_id)	faculty
4	Gryffindor
5	Slytherin

The bottom status bar indicates 'Result 15 x' and 'Read Only'.

19. Используя оператор [CASE](#) опишите следующую логику:

Выведите имя и фамилию персонажа, а также следующий текстовое сообщение:

Если факультет Gryffindor, то в консоли должно вывестись Godric

Если факультет Slytherin, то в консоли должно вывестись Salazar

Если факультет Ravenclaw, то в консоли должно вывестись Rowena

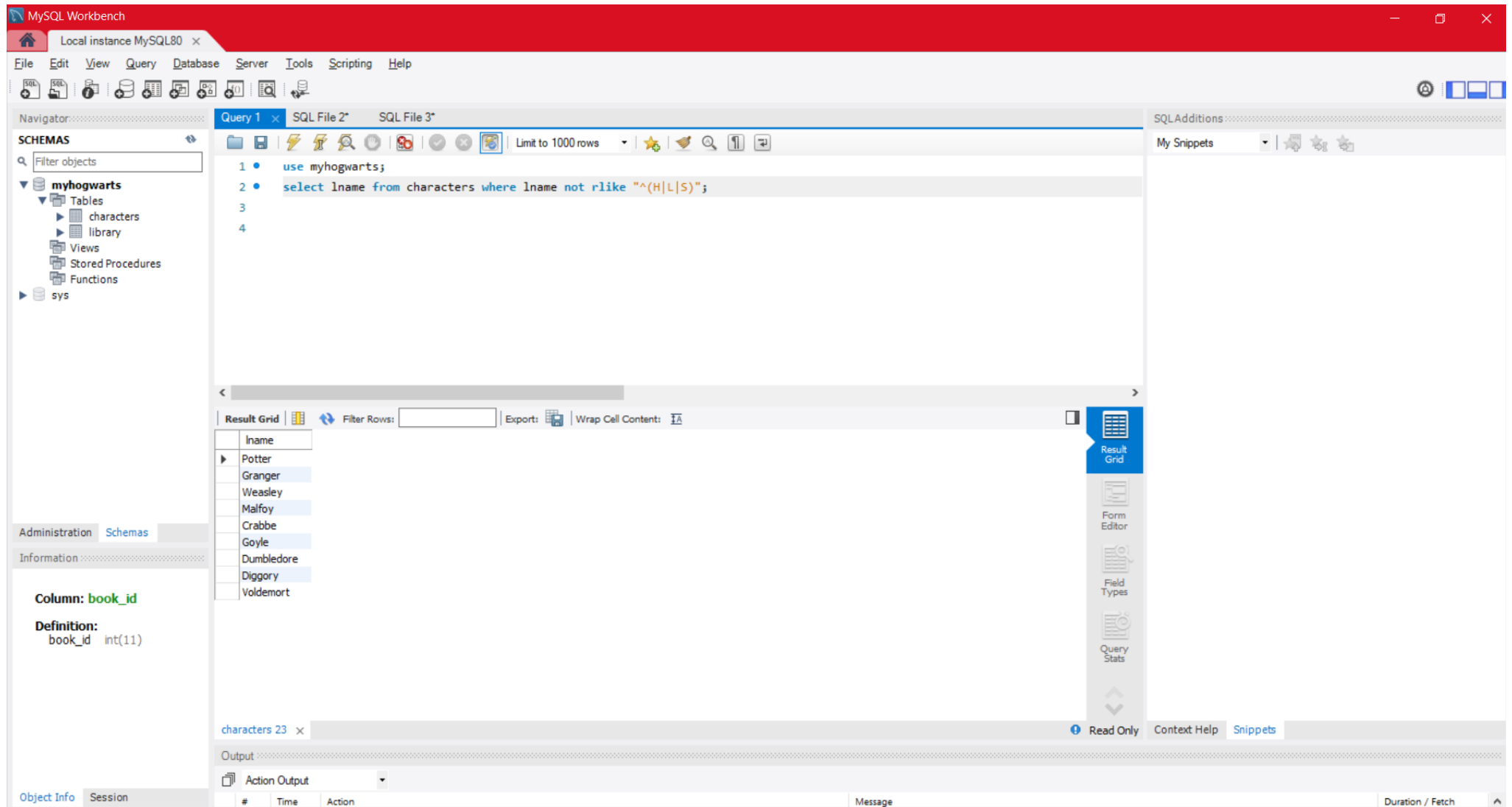
Если факультет Hufflepuff, то в консоли должно вывестись Helga

Если другая информация, то выводится Muggle

Для сообщения используйте псевдоним Founders



20. Используя регулярное выражение найдите фамилии персонажей, которые не начинаются с букв H, L или S и выведите их



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'myhogwarts' expanded, showing 'characters' and 'library' tables. The main editor window contains the following SQL query:

```
1 • use myhogwarts;  
2 • select lname from characters where lname not rlike "^(H|L|S)";  
3  
4
```

The 'Result Grid' tab is active, showing the following results:

lname
Potter
Granger
Weasley
Malfoy
Crabbe
Goyle
Dumbledore
Diggory
Voldemort

The bottom status bar shows 'characters 23' and 'Read Only'.

