

SQL TASK 1

1. Display the first name, last name, and patronus of all characters who have a patronus and it is known.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with a tree view of the 'hogwarts' database schema, including tables, characters, and columns. The 'Information' pane shows details for the 'characters' table, including columns like char_id, fname, lname, age, faculty, patronus, and book_id. The main editor window displays a SQL query in Russian and English, which is executed. The 'Result Grid' pane shows the results of the query, displaying a table with columns fname, lname, and patronus. The 'Output' pane at the bottom shows the execution message: 'SELECT fname, lname, patronus FROM hogwarts.characters WHERE NOT patronus = 'Unknown' AND patronus IS NOT NULL; 6 row(s) returned'.

MySQL Workbench

Local instance MySQL80 - W...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

▼ hogwarts

▼ Tables

▼ characters

▼ Columns

- char_id
- fname
- lname
- age
- faculty
- patronus
- book_id

Indexes

Foreign Keys

Triggers

Administration

Schemas

Information

Table: **characters**

Columns:

- char_id int AI PK
- fname varchar(45)
- lname varchar(45)
- age int
- faculty varchar(45)
- patronus varchar(45)
- book_id int

SQL File 3*

Limit to 1000 rows

```
1 #1. Выведите имя, фамилию, патронуса всех персонажей, у которых есть патронус и он известен
2 SELECT fname, lname, patronus
3 FROM hogwarts.characters
4 WHERE NOT patronus = 'Unknown' AND patronus IS NOT NULL;
```

Result Grid

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

characters 1 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	22:47:08	SELECT fname, lname, patronus FROM hogwarts.characters WHERE NO...	6 row(s) returned	0.000 sec / 0.000 sec

2. Output the last name of characters whose last letter in the surname is 'e'.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'SCHEMAS' panel with a tree view of the 'hogwarts' database, including tables, columns, indexes, foreign keys, and triggers. The 'Table: characters' is selected, and its columns are listed: char_id (int AI PK), fname (varchar(45)), lname (varchar(45)), age (int), faculty (varchar(45)), patronus (varchar(45)), and book_id (int). The main editor shows a SQL query in a file named 'SQL File 3*'. The query is:

```
1 #2. Выведите фамилию персонажей, у которых последняя буква в фамилии 'e'
2 SELECT lname
3 FROM hogwarts.characters
4 WHERE lname like "%e";
```

 The 'Result Grid' is visible below the query editor, showing the results of the query. The results are:

lname
Crabbe
Goyle
Dumbledore
Snape

 The bottom status bar shows the output of the query:

```
characters 2 x
```

 and

```
Output
```

#	Time	Action	Message	Duration / Fetch
1	22:47:08	SELECT fname, lname, patronus FROM hogwarts.characters WHERE NO...	6 row(s) returned	0.000 sec / 0.000 sec

3. Calculate the total age of all characters and display it on the screen.

The screenshot shows the MySQL Workbench interface. The 'Navigator' panel on the left shows the 'hogwarts' database with a 'characters' table. The 'SQL File 3*' editor in the center contains the following SQL query:

```
1 #3. Посчитайте общий возраст всех персонажей и выведите это на экран
2 SELECT sum(age)
3 FROM hogwarts.characters
4
```

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

sum(age)
257

The 'Information' panel on the left shows the table structure for 'characters':

Table: characters

Columns:

- char_id int AI PK
- fname varchar(45)
- lname varchar(45)
- age int
- faculty varchar(45)
- patronus varchar(45)
- book_id int

The 'Output' panel at the bottom shows the execution log:

#	Time	Action	Message	Duration / Fetch
✓ 1	22:47:08	SELECT fname, lname, patronus FROM hogwarts.characters WHERE NO...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 2	22:50:05	SELECT lname FROM hogwarts.characters WHERE lname like "%e" LIM...	4 row(s) returned	0.000 sec / 0.000 sec
✓ 3	22:52:12	SELECT sum(age) FROM hogwarts.characters LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

4. Display the first name, last name, and age of characters in descending order of their age.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'SCHEMAS' panel with a tree view of the 'hogwarts' database, including tables, columns, indexes, foreign keys, and triggers. The 'Table: characters' is selected, showing its columns: char_id (int AI PK), fname (varchar(45)), lname (varchar(45)), age (int), faculty (varchar(45)), patronus (varchar(45)), and book_id (int). The main editor window shows a SQL query in Russian: '#4. Выведите имя, фамилию и возраст персонажей по убыванию их возраста' followed by the SQL code: 'SELECT fname, lname, age FROM hogwarts.characters order by age desc;'. The 'Result Grid' shows the query results with columns fname, lname, and age. The results are: 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), and Lord Voldemort (NULL). The bottom panel shows the 'Output' tab with a table of query actions and their results.

MySQL Workbench

Local instance MySQL80 - W...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

▼ hogwarts

▼ Tables

▼ characters

▼ Columns

- char_id
- fname
- lname
- age
- faculty
- patronus
- book_id

Indexes

Foreign Keys

Triggers

Administration

Schemas

Information

Table: characters

Columns:

- char_id int AI PK
- fname varchar(45)
- lname varchar(45)
- age int
- faculty varchar(45)
- patronus varchar(45)
- book_id int

SQL File 3*

Limit to 1000 rows

```
1 #4. Выведите имя, фамилию и возраст персонажей по убыванию их возраста
2 SELECT fname, lname, age
3 FROM hogwarts.characters
4 order by age desc;
```

Result Grid

	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

characters 4 ×

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	22:47:08	SELECT fname, lname, patronus FROM hogwarts.characters WHERE NO...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 2	22:50:05	SELECT lname FROM hogwarts.characters WHERE lname like "%e" LIM...	4 row(s) returned	0.000 sec / 0.000 sec
✓ 3	22:52:12	SELECT sum(age) FROM hogwarts.characters LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

5. Display the name and age of characters whose age falls within the range of 50 to 100 years.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with a tree view of the 'hogwarts' database schema, including tables, columns, indexes, foreign keys, triggers, and administration. The 'Information' pane shows details for the 'characters' table, including column names and data types.

The main editor window displays a SQL query in a file named 'SQL File 3*'. The query is as follows:

```
1 #5. Выведите имя персонажа и возраст, у которых последний находится в диапазоне от 50 до 100 л
2 SELECT fname, age
3 FROM hogwarts.characters
4 WHERE age between 50 and 100 ;
```

The 'Result Grid' pane shows the results of the query, displaying two columns: 'fname' and 'age'. The first row shows 'Severus' and '55'.

The 'Output' pane at the bottom shows the execution log, including the time, action, message, and duration for each query.

#	Time	Action	Message	Duration / Fetch
✓ 2	22:50:05	SELECT lname FROM hogwarts.characters WHERE lname like "%e" LI...	4 row(s) returned	0.000 sec / 0.000 sec
✓ 3	22:52:12	SELECT sum(age) FROM hogwarts.characters LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✓ 4	22:55:20	SELECT fname, lname, age FROM hogwarts.characters order by age de...	11 row(s) returned	0.000 sec / 0.000 sec

6. Display the age of all characters in such a way that there are no characters with the same age among them.

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' pane shows the 'hogwarts' database with a 'characters' table. The 'Columns' pane for 'characters' lists: char_id, fname, lname, age, faculty, patronus, and book_id. The 'Information' pane shows the table structure for 'characters'.

The central 'SQL File 3*' pane contains the following SQL query:

```
1 #6. Выведите возраст всех персонажей так, чтобы среди них не было тех, у кого он одинаковый
2 SELECT distinct age
3 FROM hogwarts.characters
4
```

The 'Result Grid' pane shows the results of the query:

age
11
111
14
55
NULL

The 'Output' pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
3	22:52:12	SELECT fname, lname, age FROM hogwarts.characters LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
4	22:55:20	SELECT fname, lname, age FROM hogwarts.characters order by age desc LIMIT 0, 1000	11 row(s) returned	0.000 sec / 0.000 sec
5	22:58:02	SELECT fname, lname, age FROM hogwarts.characters WHERE age between ... LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec

7. Display all the information about characters whose faculty is Gryffindor and whose age is over 30 years.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'SCHEMAS' panel with a tree view showing the 'hogwarts' database and its 'characters' table. The 'Information' panel shows the table structure for 'characters'.

The main editor window displays a SQL query in a file named 'SQL File 3*':

```
#7. Выведите всю информацию о персонажах, у которых faculty = Gryffindor и чей возраст больше 30 лет.
SELECT *
FROM hogwarts.characters
WHERE faculty = "Gryffindor" and age > 30;
```

The 'Result Grid' shows the query results:

char_id	fname	lname	age	faculty	patronus	book_id
7	Albus	Dumbledore	111	Gryffindor	Phoenix	2
NULL	NULL	NULL	NULL	NULL	NULL	NULL

The bottom panel shows the 'Output' tab with a table of query actions:

#	Time	Action	Message	Duration / Fetch
4	22:55:20	SELECT fname, lname, age FROM hogwarts.characters order by age de...	11 row(s) returned	0.000 sec / 0.000 sec
5	22:58:02	SELECT fname, age FROM hogwarts.characters WHERE age between ...	1 row(s) returned	0.016 sec / 0.000 sec
6	22:59:15	SELECT distinct age FROM hogwarts.characters LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

8. Display the names of the first three faculties from the table, ensuring that the faculties are not repeated.

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' pane shows the 'hogwarts' database with a 'characters' table. The 'Columns' pane for 'characters' lists: char_id, fname, lname, age, faculty, patronus, and book_id. The 'Information' pane shows the table structure for 'characters'.

The central 'SQL File 3*' pane contains the following SQL query:

```
1 #8. Выведите имена первых трех факультетов из таблицы, так чтобы факультеты не повторялись
2 SELECT distinct faculty
3 FROM hogwarts.characters
4 limit 3;
5
```

The 'Result Grid' pane shows the results of the query:

faculty
Gryffindor
Slytherin
Ravenclaw

The 'Output' pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
5	22:58:02	SELECT fname, age FROM hogwarts.characters WHERE age between ...	1 row(s) returned	0.016 sec / 0.000 sec
6	22:59:15	SELECT distinct age FROM hogwarts.characters LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	23:01:38	SELECT * FROM hogwarts.characters WHERE faculty = "Gryffindor" an...	1 row(s) returned	0.000 sec / 0.000 sec

9. Display the names of all characters whose name starts with 'H' and consists of 5 letters, or whose name starts with 'L'.

The screenshot shows the MySQL Workbench interface. The left sidebar contains a 'Navigator' pane with a 'Schemas' view showing a tree structure for the 'hogwarts' database, including tables 'characters' and 'library', views, stored procedures, and functions. Below this is an 'Administration' pane with a 'Schemas' tab and an 'Information' pane showing 'No object selected'.

The main workspace is titled 'Query 1' and contains the following SQL query:

```
1 • select fname
2   from hogwarts.characters
3  where fname like "H____" or fname like "L%";
```

Below the query editor, the 'Result Grid' tab is active, displaying the results of the query. The results are as follows:

	fname
▶	Harry
▶	Luna

The bottom of the interface shows the 'Output' pane with a dropdown menu set to 'Action Output'. It displays a log of actions performed:

#	Time	Action	Message	Duration / Fetch
✓ 1	13:27:20	select fname from hogwarts.characters where fname like "H____" or fnam...	2 row(s) returned	0.000 sec / 0.000 sec
✓ 2	13:27:30	select fname from hogwarts.characters where fname like "H____" or fnam...	2 row(s) returned	0.000 sec / 0.000 sec

On the right side of the interface, there is a 'SQL Additions' pane with a 'Jump to' field 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.'

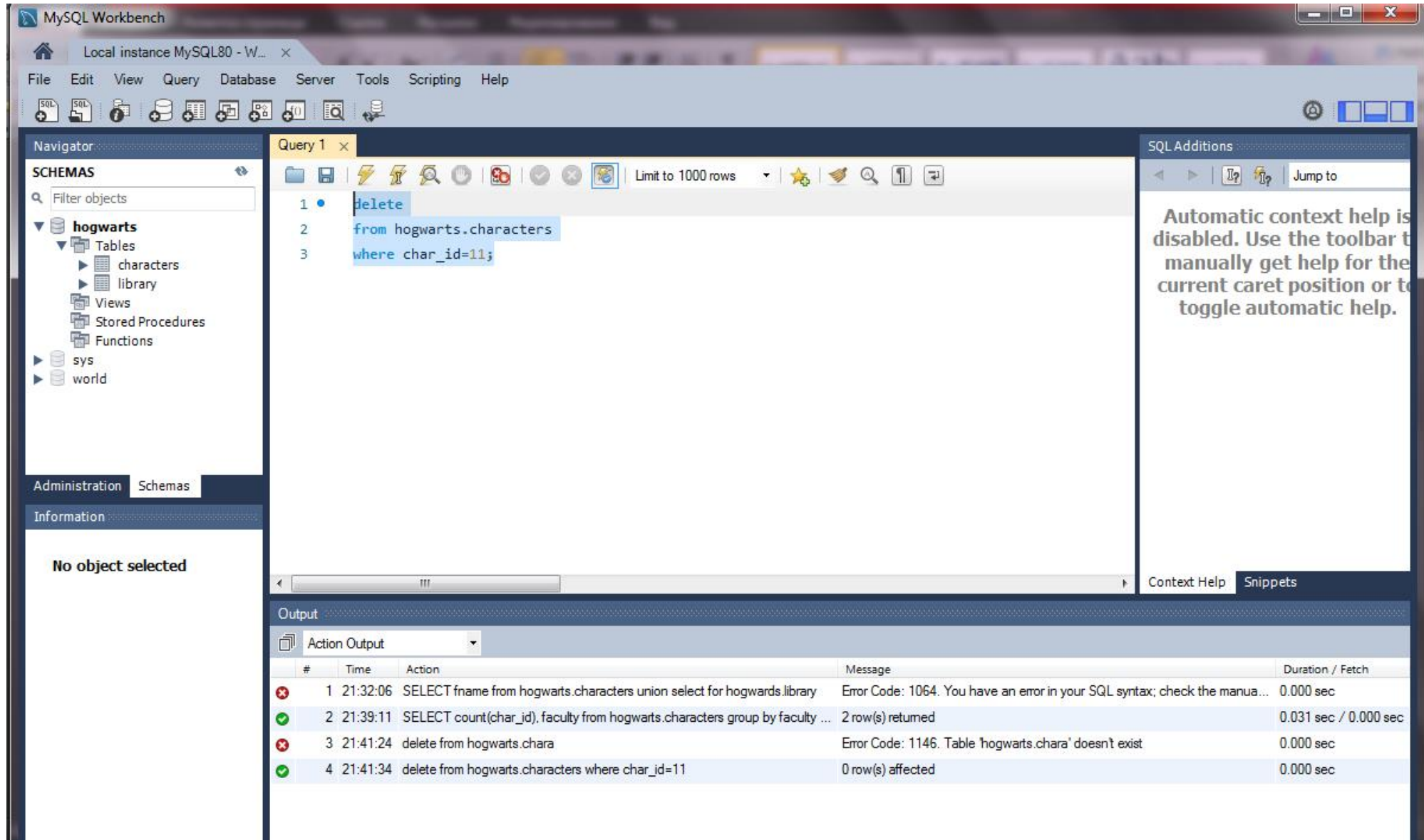
10. Calculate the average age of all characters.

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

- Navigator:** Displays the database structure for 'hogwarts', including tables, characters, columns, indexes, foreign keys, and triggers.
- SQL Editor:** Contains the SQL query: `SELECT avg(age) FROM hogwarts.characters`. A tooltip indicates that the 'Limit to 1000 rows' option is set.
- Result Grid:** Shows the query result: `avg(age)` with the value `25.7000`.
- Output:** Displays the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
8	23:03:18	SELECT distinct faculty FROM hogwarts.characters limit 3	3 row(s) returned	0.000 sec / 0.000 sec
9	23:05:26	SELECT fname FROM hogwarts.characters WHERE fname like "H" OR ...	2 row(s) returned	0.000 sec / 0.000 sec
10	23:06:18	SELECT fname FROM hogwarts.characters WHERE fname like "H____..."	3 row(s) returned	0.000 sec / 0.000 sec

11. Delete the character with ID = 11.



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'Schemas' tree with the 'hogwarts' database selected. The main editor window shows a SQL query in 'Query 1':

```
1 delete
2 from hogwarts.characters
3 where char_id=11;
```

The right sidebar shows the 'SQL Additions' panel 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 panel shows the 'Output' window with the 'Action Output' tab selected. It displays a table of execution results:

#	Time	Action	Message	Duration / Fetch
1	21:32:06	SELECT fname from hogwarts.characters union select for hogwarts.library	Error Code: 1064. You have an error in your SQL syntax; check the manual...	0.000 sec
2	21:39:11	SELECT count(char_id), faculty from hogwarts.characters group by faculty ...	2 row(s) returned	0.031 sec / 0.000 sec
3	21:41:24	delete from hogwarts.chara	Error Code: 1146. Table 'hogwarts.chara' doesn't exist	0.000 sec
4	21:41:34	delete from hogwarts.characters where char_id=11	0 row(s) affected	0.000 sec

12. Display the last name of all characters that contain the letter 'a' in their name.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'SCHEMAS' panel with a tree view of the 'hogwarts' database, including tables, columns, indexes, foreign keys, triggers, and schemas. The 'Information' panel shows the structure of the 'characters' table.

The central 'SQL File 3*' editor displays the following SQL query:

```
1  #12 Выведите фамилию всех персонажей, которые содержат в ней букву 'а'
2  SELECT lname
3  FROM hogwarts.characters
4  where lname like "%a%";
```

The 'Result Grid' panel shows the results of the query, displaying the 'lname' column with the following values:

lname
Granger
Weasley
Malfoy
Crabbe
Snape

The bottom 'Output' panel shows the 'Action Output' tab with the following log entry:

#	Time	Action	Message	Duration / Fetch
12	23:08:41	delete FROM hogwarts.characters where char_id=11	1 row(s) affected	0.093 sec

13. Use an alias to temporarily replace the column name "fname" with "Half-Blood Prince" for the real Half-Blood Prince.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'characters' table selected. The 'Information' panel shows the table's columns: char_id (int AI PK), fname (varchar(45)), lname (varchar(45)), age (int), faculty (varchar(45)), patronus (varchar(45)), and book_id (int). The central SQL editor contains the following query:

```
1 #13.Используйте псевдоним для того, чтобы временно заменить название столбца fname на Half-Blo
2 • SELECT fname as Half_Blood_Prince
3 FROM hogwarts.characters
4 where fname = "Severus";
```

The 'Result Grid' panel shows the results of the query, with the column 'Half_Blood_Prince' and the value 'Severus'. The 'Output' panel at the bottom shows the execution log:

#	Time	Action	Message	Duration / Fetch
15	23:11:43	SELECT lname FROM hogwarts.characters where lname like "%a%" LIM...	5 row(s) returned	0.000 sec / 0.000 sec
16	23:14:12	SELECT fname as Half_Blood_Prince FROM hogwarts.characters where...	Error Code: 1064. You have an error in your SQL syntax; check the man...	0.000 sec

The error message indicates a syntax error (Error Code: 1064) in the SQL query. A tooltip on the right side of the interface states: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

14. Display the IDs and names of all Patronuses in alphabetical order, provided that they exist or are known.

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'SCHEMAS' panel with a tree view of the 'characters' table columns: char_id, fname, lname, age, faculty, patronus, and book_id. Below this is the 'Information' panel for the 'characters' table, listing the columns and their data types: char_id (int AI PK), fname (varchar(45)), lname (varchar(45)), age (int), faculty (varchar(45)), patronus (varchar(45)), and book_id (int).

The central SQL editor shows a query in Russian: '#14. Выведите id и имена всех патронусов в алфавитном порядке, при условии что они есть или известны'. The SQL code is: `SELECT char_id, patronus FROM hogwarts.characters where not patronus = "Unknown" and patronus is not null order by patronus ASC;`

The 'Result Grid' shows the results of the query:

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

The bottom panel shows the 'Output' tab with 'Action Output' selected. It displays two successful actions:

#	Time	Action	Message	Duration / Fetch
✓ 18	23:17:31	SELECT char_id, patronus FROM hogwarts.characters where not patron...	7 row(s) returned	0.016 sec / 0.000 sec
✓ 19	23:18:36	SELECT char_id, patronus FROM hogwarts.characters where not patron...	7 row(s) returned	0.000 sec / 0.000 sec

15. Using the IN operator, display the first name and last name of characters whose last name is Crabbe, Granger, or Diggory.

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

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

SELECT fname, lname
FROM hogwarts.characters
where lname in ("Crabbe", "Granger", "Diggory");
```

The results are displayed in the Result Grid:

fname	lname
Hermione	Granger
Vincent	Crabbe
Cedric	Diggory

The left sidebar shows the Schemas panel with the 'characters' table selected. The bottom panel shows the Output window with the following log:

#	Time	Action	Message	Duration / Fetch
19	23:18:36	SELECT char_id, patronus FROM hogwarts.characters where not patron...	7 row(s) returned	0.000 sec / 0.000 sec
20	23:18:59	SELECT char_id, patronus FROM hogwarts.characters where not patron...	7 row(s) returned	0.000 sec / 0.000 sec

16. Display the minimum age of a character.

The screenshot shows the MySQL Workbench interface. The left sidebar contains a 'Navigator' pane with a tree view of the 'characters' table columns: char_id, fname, lname, age, faculty, patronus, and book_id. Below this is an 'Information' pane showing the table's structure. The main editor window displays a SQL query: `SELECT min(age) FROM hogwarts.characters`. The 'Result Grid' pane shows a single row with the value '11'. The bottom pane shows the 'Output' log with two entries: a successful query execution for the first query and a successful query execution for the second query.

Table: characters

Columns:

- char_id int AI PK
- fname varchar(45)
- lname varchar(45)
- age int
- faculty varchar(45)
- patronus varchar(45)
- book_id int

SQL Query:

```
SELECT min(age)
FROM hogwarts.characters
```

Result Grid:

min(age)
11

Output Log:

#	Time	Action	Message	Duration / Fetch
20	23:18:59	SELECT char_id, patronus FROM hogwarts.characters where not patron...	7 row(s) returned	0.000 sec / 0.000 sec
21	23:21:12	SELECT fname, lname FROM hogwarts.characters where lname in ("Cra...	3 row(s) returned	0.000 sec / 0.000 sec

17. Using the UNION operator, select the names from the "characters" table and the book titles from the "library" table.

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' pane shows the 'hogwarts' database with tables 'characters' and 'library'. The central 'Query 1' pane contains the following SQL code:

```
1 SELECT fname
2 from hogwarts.characters
3 union
4 select
5 for hogwarts.library;
```

The output pane at the bottom shows an error message:

#	Time	Action	Message	Duration / Fetch
1	21:32:06	SELECT fname from hogwarts.characters union select for hogwarts.library	Error Code: 1064. You have an error in your SQL syntax; check the manual ...	0.000 sec

The error message indicates a syntax error (Error Code: 1064) due to the incorrect use of the 'for' keyword in the second SELECT statement of the UNION query.

18. Using the HAVING operator, count the number of characters in each faculty, keeping only the faculties where the number of students is greater than 1.

The screenshot shows the MySQL Workbench interface. The 'Navigator' pane on the left displays the 'hogwarts' database schema with tables 'characters' and 'library'. The 'Query 1' editor in the center contains the following SQL query:

```
1 SELECT count(char_id), faculty
2 from hogwarts.characters
3 group by faculty
4 having count(char_id) > 1;
```

The 'Result Grid' below the query shows the results of the query:

count(char_id)	faculty
4	Gryffindor
4	Slytherin

The 'Output' pane at the bottom shows an error message:

#	Time	Action	Message	Duration / Fetch
1	21:32:06	SELECT frame from hogwarts.characters union select for hogwarts.library	Error Code: 1064. You have an error in your SQL syntax; check the manual...	0.000 sec

19. Using the CASE operator, describe the following logic:

Display the first name and last name of the character, along with the following text message: If the faculty is Gryffindor, then the console should display "Godric"

If the faculty is Slytherin, then the console should display "Salazar"

If the faculty is Ravenclaw, then the console should display "Rowena"

If the faculty is Hufflepuff, then the console should display "Helga"

If there is no match, then display "Muggle"

For the message, use the alias "Founders"

MySQL Workbench

Local instance MySQL80 - W...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

Tables

characters

Columns

- char_id
- fname
- lname
- age
- faculty
- patronus
- book_id

Indexes

Foreign Keys

Triggers

Administration Schemas

Information

Table: **characters**

Columns:

- char_id** int AI PK
- fname varchar(45)
- lname varchar(45)
- age int
- faculty varchar(45)
- patronus varchar(45)
- book_id** int

SQL File 3* x

Limit to 1000 rows

```
1
2 SELECT fname, lname,
3 CASE
4   when faculty = "Gryffindor" then "Godric"
5   when faculty = "Slytherin" then "Salazar"
6   when faculty = "Ravenclaw" then "Rowena"
7   when faculty = "Hufflepuff" then "Helga"
8   else "Muggle"
9 end as Founders
10 From hogwarts.characters
```

Result Grid

	fname	lname	Founders
▶	Harry	Potter	Godric
	Hermione	Granger	Godric
	Ron	Weasley	Godric
	Draco	Malfoy	Muggle
	Vincent	Crabbe	Muggle
	Gregory	Goyle	Muggle
	Albus	Dumbledore	Godric
	Luna	Lovegood	Rowena
	Cedric	Diggory	Helga
	Severus	Snape	Muggle

Result 22 x

Read Only Context Help Snippets

Output

Action Output

SQL Additions

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

20. Using a regular expression, find the last names of characters that do not start with the letters H, L, or S, and display them.

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' panel with the 'hogwarts' database selected. The 'Tables' list under 'hogwarts' includes 'characters', 'library', 'Views', 'Stored Procedures', and 'Functions'. The 'Administration' and 'Schemas' tabs are visible at the bottom of the sidebar.

The main query editor, titled 'Query 1', contains the following SQL code:

```
1 SELECT lname
2 from hogwarts.characters
3 where not lname regexp "^[HLS]";
```

The 'Result Grid' tab is active, showing the results of the query. The results are displayed in a table with one column, 'lname', and eight rows of names:

lname
Potter
Granger
Weasley
Malfoy
Crabbe
Goyle
Dumbledore
Diggory

The bottom panel shows the 'Output' tab with 'Action Output' selected. It displays a log of the executed queries and their results:

#	Time	Action	Message	Duration / Fetch
1	13:24:24	SELECT lname from hogwarts.characters where not lname regexp "^[HLS]..."	8 row(s) returned	0.047 sec / 0.000 sec
2	13:24:43	SELECT lname from hogwarts.characters where not lname regexp "^[HLS]..."	8 row(s) returned	0.000 sec / 0.000 sec

On the right side of the interface, the 'SQL Additions' panel is visible, displaying a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'