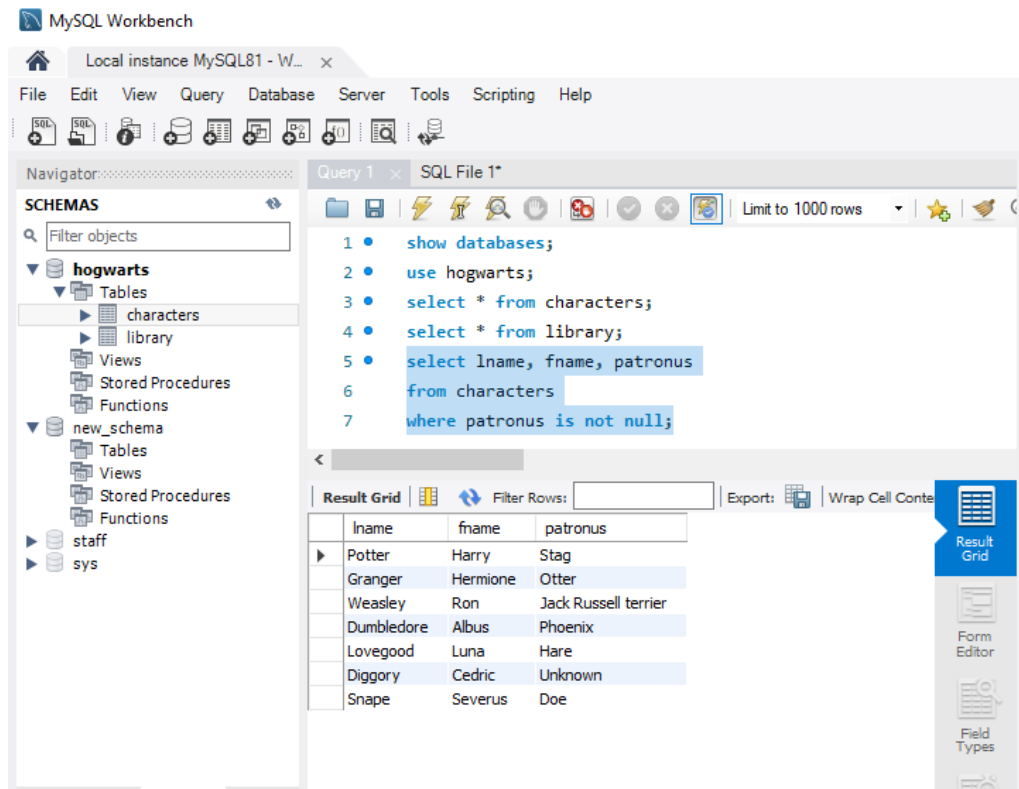
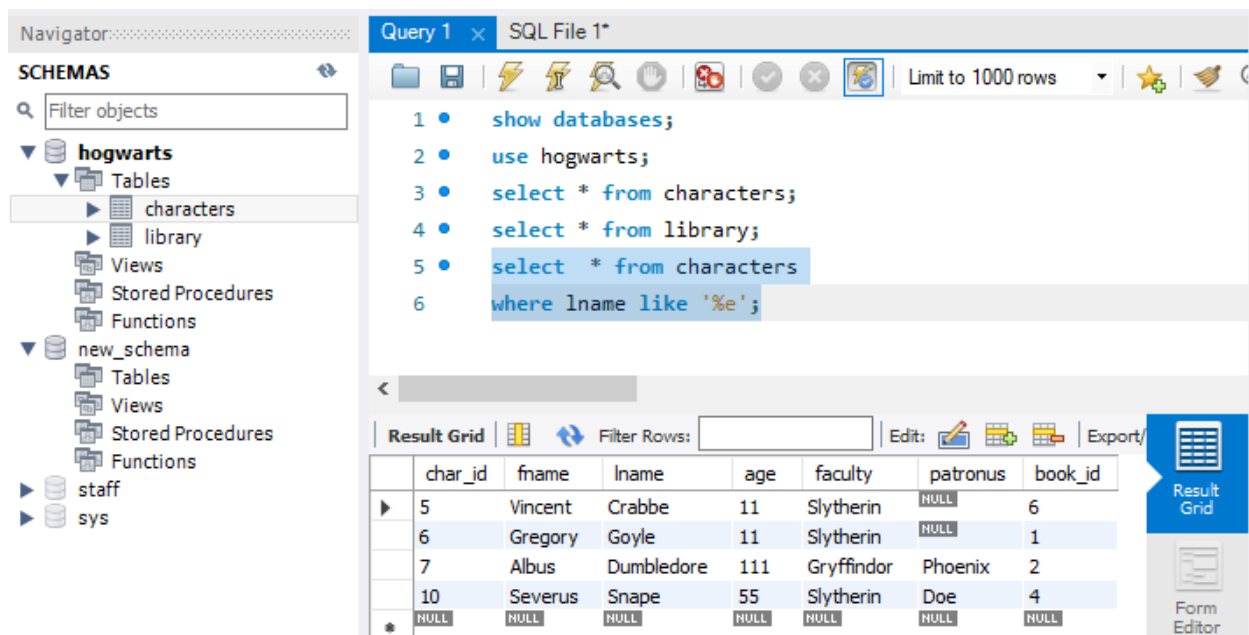


1. Выведите имя, фамилию, патронуса всех персонажей, у которых есть patronus и он известен



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



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

The screenshot shows the SQL Studio interface. On the left, the 'Navigator' pane displays the 'hogwarts' database schema, including tables 'characters' and 'library'. The main query editor shows the following SQL code:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select sum(age)
6 • from characters;
```

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

sum(age)
257

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

The screenshot shows the SQL Studio interface. The main query editor shows the following SQL code:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select fname, lname, age
6 • from characters
7 • order by age desc;
```

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

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

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

Navigator: SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- ▼ staff
- ▼ sys

Query 1 x SQL File 1*

Limit to 1000 rows

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select fname, age
6   from characters
7  where age between 50 and 100;

```

Result Grid

fname	age
Severus	55

Export: | Wrap Cell Conte

Result Grid

Form Editor

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

Navigator: SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- ▼ staff
- ▼ sys

Query 1 x SQL File 1*

Limit to 1000 rows

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select distinct age
6   from characters;
7

```

Result Grid

age
11
111
14
55
NULL

Export: | Wrap Cell Conte

Result Grid

Form Editor

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

Navigator: SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- staff
- sys

Query 1 x SQL File 1*

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select * from characters
6   where faculty = 'Gryffindor' and age > 30;
7

```

Result Grid

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

Result Grid

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

Navigator: SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- staff
- sys

Query 1 x SQL File 1*

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select distinct faculty
6   from characters
7   limit 3;

```

Result Grid

	faculty
▶	Gryffindor
	Slytherin
	Ravendaw

Result Grid

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

SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- staff
- sys

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select * from characters
6   where fname like 'H____' or fname like 'L%';

```

Result Grid

	char_id	fname	lname	age	faculty	patronus	book_id
▶	1	Harry	Potter	11	Gryffindor	Stag	10
	8	Luna	Lovegood	11	Ravendaw	Hare	2
	11	Lord	Voldemort	NULL	Slytherin	NULL	5
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid

Form

10. Посчитайте средний возраст всех персонажей

Navigator

SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- staff
- sys

Query 1 x SQL File 1*

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select avg(age)
6   from characters;
7

```

Result Grid

	avg(age)
▶	25.7000

Result Grid

11. Удалите персонажа с ID = 11

Navigator: SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- staff
- sys

Administration Schemas Information

Query 1 x SQL File 1*

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • delete from characters
6   where char_id = '11';
7

```

Result Grid

	char_id	fname	lname	age	faculty	patronus	book
▶	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

Result Grid Form Editor Field Types Query State

Персонаж с ID=11 удален

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

Navigator: SCHEMAS

Filter objects

- ▼ **hogwarts**
 - ▼ Tables
 - characters
 - library
 - Views
 - Stored Procedures
 - Functions
- ▼ new_schema
 - Tables
 - Views
 - Stored Procedures
 - Functions
- staff
- sys

Administration Schemas Information

Query 1 x SQL File 1*

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select * from characters
6   where lname like '%a%';

```

Result Grid

	char_id	fname	lname	age	faculty	patronus	book
▶	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
	10	Severus	Snape	55	Slytherin	Doe	4
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid Form Editor Field Types Query State

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

The screenshot shows a database management tool interface. On the left, the 'SCHEMAS' pane displays a tree view of the database structure, including 'hogwarts' (Tables: characters, library; Views; Stored Procedures; Functions), 'new_schema' (Tables; Views; Stored Procedures; Functions), 'staff', and 'sys'. The main query editor on the right contains the following SQL code:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select fname AS 'Half-Blood Prince'
6 • from characters
7 • where fname = 'Harry';
```

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

fname AS 'Half-Blood Prince'
Half-Blood Prince
Harry

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

The screenshot shows the same database management tool interface. The SQL query editor contains the following code:

```
3 • select * from characters;
4 • select * from library;
5 • select char_id, patronus
6 • from characters
7 • where patronus is not null
8 • order by patronus ASC;
```

The 'Result Grid' displays 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

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

The screenshot shows a database management tool interface. On the left, the 'SCHEMAS' pane displays a tree view with 'hogwarts' expanded, showing 'characters' and 'library' tables. The main editor displays a SQL query:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select fname, lname
6 • from characters
7 • where lname IN ('Crabbe', 'Granger', 'Diggory');
```

Below the query, the 'Result Grid' shows the following data:

fname	lname
Hermione	Granger
Vincent	Crabbe
Cedric	Diggory

16. Выведите минимальный возраст персонажа

The screenshot shows the same database management tool interface. The SQL query in the editor is:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select min(age)
6 • from characters;
```

The 'Result Grid' shows the following data:

min(age)
11

17. Используя оператор UNION выберите имена из таблицы characters и названия книг из таблицы library

The screenshot shows the SQL Studio interface. On the left, the 'SCHEMAS' pane displays a tree view with 'hogwarts' and 'new_schema' databases. The 'characters' table is selected under 'hogwarts'. Below this, the 'Table: characters' details are shown, including columns: char_id (int AI PK), fname (varchar(45)), lname (varchar(45)), age (int), and faculty (varchar(45)).

The main query window displays the following SQL code:

```

1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select fname from characters
6 • union
7 • select book_name from library;

```

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

fname
Harry
Hermione
Ron
Draco
Vincent
Gregory
Albus
Luna
Cedric
Severus
Hogwarts: A History
Quidditch Through The Ages
The Lockhart Collection
Moste Potente Potions
The Life And Lies Of Albus D...
Fantastic Beasts And Where ...
The Tales Of Beadle The Bard
Advanced Potion-Making
A History Of Magic
Magical Water Plants Of The ...

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

The screenshot shows the SQL Studio interface. The main query window displays the following SQL code:

```

3 • select * from characters;
4 • select * from library;
5 • select count(char_id), faculty
6 • from characters
7 • group by faculty
8 • having count(char_id) > 1;
9

```

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

count(char_id)	faculty
4	Gryffindor
4	Slytherin

19. Используя оператор CASE опишите следующую логику:

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

Если факультет Gryffindor, то в консоли должно выводиться Godric

Если факультет Slytherin, то в консоли должно выводиться Salazar

Если факультет Ravenclaw, то в консоли должно выводиться Rowena

Если факультет Hufflepuff, то в консоли должно выводиться Helga

Если другая информация, то выводится Muggle

Для сообщения используйте псевдоним Founders

The screenshot shows a database management interface with a left-hand 'Navigator' pane and a main 'Query 1' editor. The 'Navigator' pane shows a tree structure of schemas: 'hogwarts' (containing 'characters' and 'library' tables) and 'new_schema'. The 'Query 1' editor contains the following SQL code:

```
4 • select * from library;
5 • select fname, lname,
6 • case
7 • when faculty = 'Gryffindor' then 'Godric'
8 • when faculty = 'Slytherin' then 'Salazar'
9 • when faculty = 'Ravenclaw' then 'Rowena'
10 • when faculty = 'Hufflepuff' then 'Helga'
11 • else 'Muggle'
12 • END AS 'FOUNDERS'
13 FROM CHARACTERS;
```

Below the query editor is the 'Result Grid' showing the output of the query. The grid has four columns: 'fname', 'lname', and 'FOUNDERS'. The data is as follows:

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

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

The screenshot shows a database management interface with a left-hand 'Navigator' pane and a main query editor area.

Navigator Pane: Displays a tree structure of schemas. The 'hogwarts' schema is expanded, showing 'Tables' (characters, library), 'Views', 'Stored Procedures', and 'Functions'. Other schemas like 'new_schema', 'staff', and 'sys' are also visible.

Query Editor: Contains a SQL query with line numbers 1 through 9. The query is as follows:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select lname
6 • FROM CHARACTERS
7 • where lname not regexp '^H'
8 • and lname not regexp '^L'
9 • and lname not regexp '^S';
```

Result Grid: Located below the query editor, it displays the results of the query. The first column is labeled 'lname'. The results are:

lname
Potter
Granger
Weasley
Malfoy
Crabbe
Goyle
Dumbledore
Diggory

The interface also includes a top toolbar with various icons for file operations and a right-hand sidebar with buttons for 'Result Grid', 'Form Editor', and 'Field'.