

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

The screenshot shows the PostgreSQL Query Editor interface. The left sidebar contains navigation menus for MANAGEMENT, INSTANCE, and PERFORMANCE. The main window displays a SQL query in the 'Query 1' tab. The query is as follows:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select characters.fname, characters.lname, library.book_name
6 FROM CHARACTERS
7 INNER JOIN library
8 on characters.char_id = library.char_id;
```

Below the query editor, the 'Result Grid' is visible, showing the results of the query. The table has three columns: fname, lname, and book\_name. The results are as follows:

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

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

The screenshot shows the PostgreSQL Query Editor interface. The left sidebar contains navigation menus for MANAGEMENT, INSTANCE, and PERFORMANCE. The main window displays a SQL query in the 'Query 1' tab. The query is as follows:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select characters.fname, characters.lname, library.book_name
6 FROM CHARACTERS
7 LEFT JOIN library
8 on characters.char_id = library.char_id;
```

Below the query editor, the 'Result Grid' is visible, showing the results of the query. The table has three columns: fname, lname, and book\_name. The results are as follows:

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

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 PostgreSQL Query Editor interface. The left sidebar contains the 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The main area displays a SQL query in 'Query 1' window. The query is as follows:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select characters.patronus, library.book_name
6 FROM CHARACTERS
7 right JOIN library
8 on characters.char_id = library.char_id;
```

Below the query editor, the 'Result Grid' shows the output of the query. The columns are 'patronus' and 'book\_name'. The results are as follows:

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

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 PostgreSQL Query Editor interface. The left sidebar contains the 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The main area displays a SQL query in 'Query 1' window. The query is as follows:

```
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select characters.fname, characters.lname, characters.age, library
6 FROM characters
7 inner JOIN library
8 on characters.char_id = library.char_id
9 where age > 15;
```

Below the query editor, the 'Result Grid' shows the output of the query. The columns are 'fname', 'lname', 'age', and 'book\_name'. The results are as follows:

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

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 PostgreSQL Query Editor interface. The left sidebar contains the 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The main editor displays a SQL query:

```
3 • select * from characters;
4 • select * from library;
5 • select characters.fname, characters.lname,
6   characters.age, library.book_name
7   FROM characters
8   inner JOIN library
9   on characters.char_id = library.char_id
10  where patronus is null and age < 15;
```

Below the query editor, the 'Result Grid' is visible, showing the following data:

fname	lname	age	book_name
Draco	Malfoy	11	Fantastic Beasts And Where To Find Them
Vincent	Crabbe	11	Fantastic Beasts And Where To Find Them
Gregory	Goyle	11	Hogwarts: A History

6. Используя вложенный запрос количество книг, у которых end\_date больше, чем end\_date у Hermione

The screenshot shows the PostgreSQL Query Editor interface. The left sidebar contains the 'Navigator' pane with sections for MANAGEMENT, INSTANCE, and PERFORMANCE. The main editor displays a SQL query:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select count(book_id)
6   FROM library
7   where end_date >
8   (select end_date
9    from library
10   inner join characters
11   on library.char_id = characters.char_id
12   where fname = 'Hermione');
```

Below the query editor, the 'Result Grid' is visible, showing the following data:

count(book_id)
2

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

The screenshot shows a SQL IDE interface. On the left is a 'Navigator' pane with categories: 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). The main area displays a SQL query in a file named 'Query 1'. The query is as follows:

```
1 • show databases;
2 • use hogwarts;
3 • select * from characters;
4 • select * from library;
5 • select patronus
6   FROM characters
7   where age >
8   (select age
9    from characters
10   where patronus = "Unknown");
```

Below the query editor, the 'Result Grid' is visible, showing the results of the query. It has a header row with 'patronus' and two data rows: 'Phoenix' and 'Doe'.

patronus
Phoenix
Doe

At the bottom right, there is a 'Result Grid' button and a 'Filter Rows' input field.