

1. Выведите имя, фамилию, патронуса всех персонажей, у которых есть patronus и он известен
(Output the name, surname, patronus of all the characters who have a patronus and it is known)

Query 1 characters x

Limit to 1000 rows

```
1 • SELECT fname, lname, patronus
2   from hogwarts.characters
3   where 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
	Cedric	Diggory	Unknown
	Severus	Snape	Doe

2. Выведите фамилию персонажей, у которых последняя буква в фамилии 'е'
(Print the last name of the characters whose last letter in the last name is 'e')

Query 1 characters x

Limit to 1000 rows

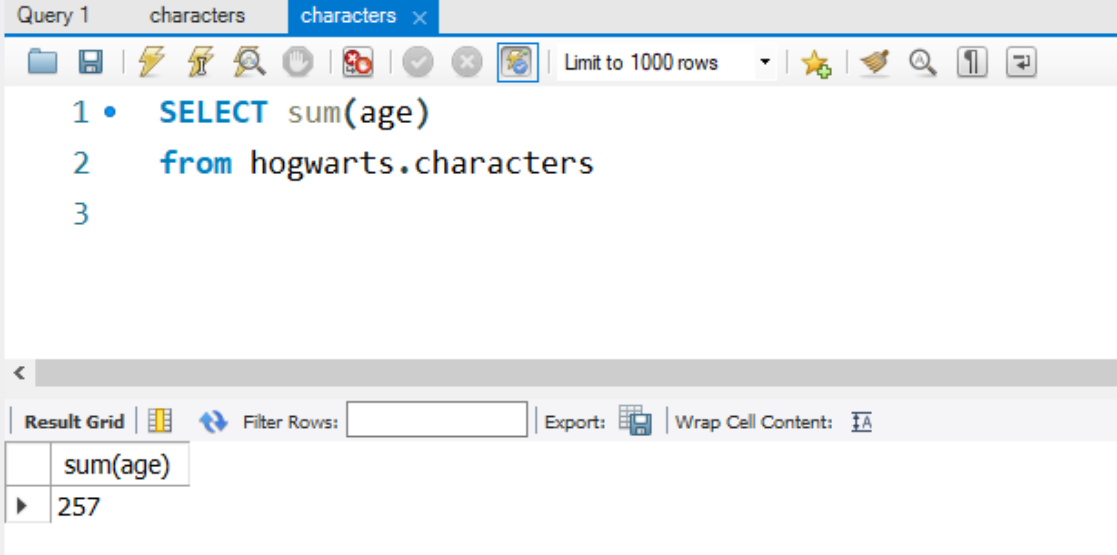
```
1 • SELECT lname
2   from hogwarts.characters
3   where lname like '%e'
```

Result Grid

	lname
▶	Crabbe
	Goyle
	Dumbledore
	Snape

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

(Calculate the total age of all the characters and display it on the screen)



The screenshot shows a SQL query editor interface. The top bar indicates the current query is 'Query 1' and the database is 'characters'. The query text is as follows:

```
1 • SELECT sum(age)
2   from hogwarts.characters
3
```

Below the query editor, the 'Result Grid' is displayed, showing the result of the query:

	sum(age)
▶	257

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

(Output the first name, last name and age of the characters in descending order of their age)

Query 1 characters characters x

Limit to 1000 rows

```
1 • SELECT fname, lname, age
2   from hogwarts.characters
3   order by age DESC
4
```

Result Grid Filter Rows: Export: Wrap Cell Content:

	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

(Enter the name of the character and the age of which the latter is in the range from 50 to 100 years)

Query 1 characters characters x

Limit to 1000 rows

```
1 • SELECT fname, age
2   from hogwarts.characters
3   where age between 50 and 100
4
```

Result Grid

	fname	age
▶	Severus	55

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

(Output the age of all the characters so that there are no people among them who have the same age)

Query 1 characters characters x

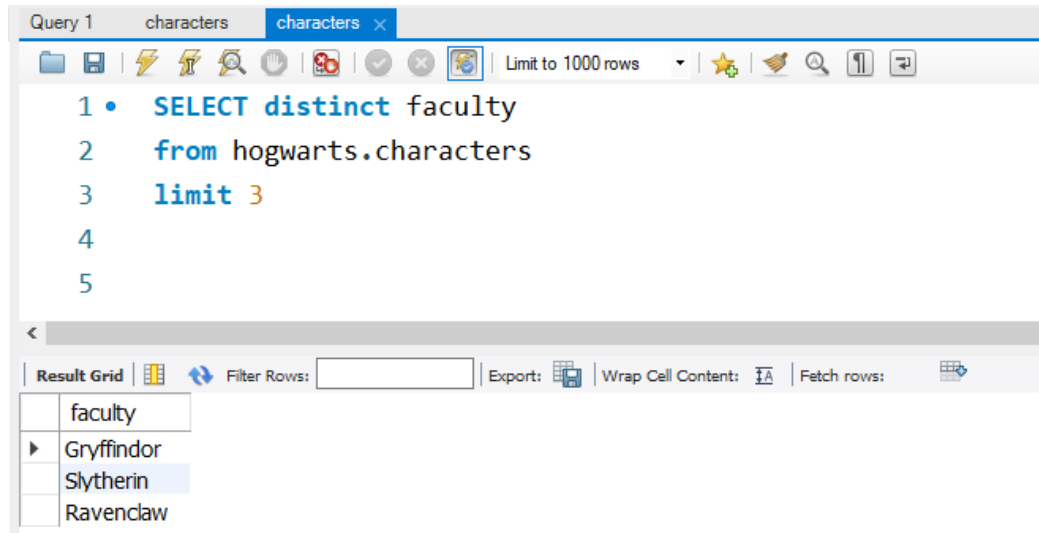
Limit to 1000 rows

```
1 • SELECT distinct age
2   from hogwarts.characters
3
4
```

Result Grid

	age
▶	11
	111
	14
	55
	NULL

8. Выведите имена первых трех факультетов из таблицы, так чтобы факультеты не повторялись
(Output the names of the first three faculties from the table, so that the faculties are not repeated)



Query 1 characters characters x

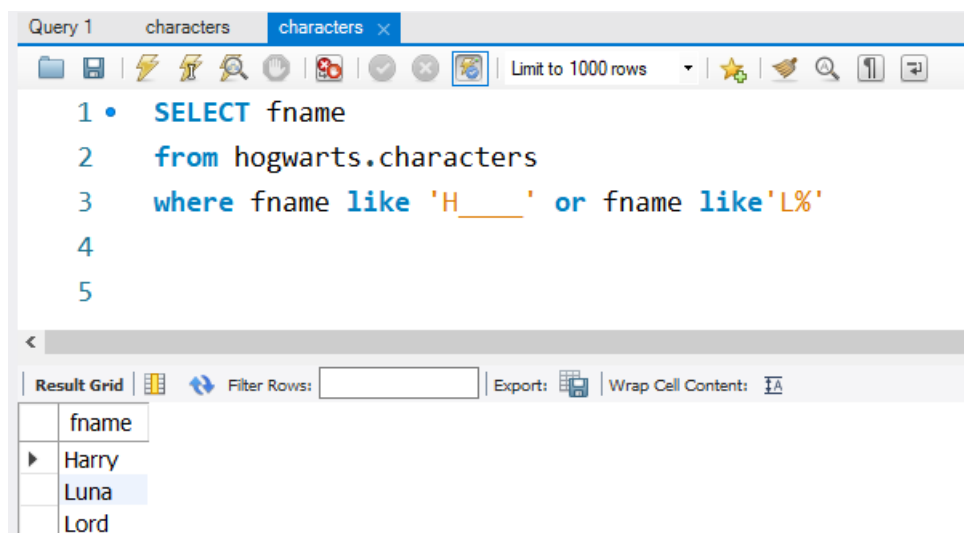
Limit to 1000 rows

```
1 • SELECT distinct faculty
2   from hogwarts.characters
3   limit 3
4
5
```

Result Grid

faculty
Gryffindor
Slytherin
Ravenclaw

9. Выведите имена всех персонажей, у которых имя начинается с 'H' и состоит из 5 букв, или чье имя начинается с 'L'
- (Print the names of all the characters whose name starts with 'H' and consists of 5 letters, or whose name starts with 'L')



Query 1 characters characters x

Limit to 1000 rows

```
1 • SELECT fname
2   from hogwarts.characters
3   where fname like 'H____' or fname like 'L%'
4
5
```

Result Grid

fname
Harry
Luna
Lord

10. Посчитайте средний возраст всех персонажей
(Calculate the average age of all the characters)


The screenshot shows a database query editor interface. At the top, there are tabs for 'Query 1', 'characters', and 'characters' (with a close button). Below the tabs is a toolbar with various icons for file operations, execution, and settings. The main area contains a SQL query:

```
1 • SELECT AVG(age)
2   from hogwarts.characters
3
4
5
```

Below the query editor is a 'Result Grid' section. It includes a 'Filter Rows' input field, an 'Export' button, and a 'Wrap Cell Content' checkbox. The result grid displays the following data:

	AVG(age)
▶	25.7000

11. Удалите персонажа с ID = 11
(Delete the character with ID = 11)



The screenshot shows a SQL query editor with a toolbar at the top. The toolbar includes icons for file operations (folder, save, lightning bolt, copy, magnifying glass, hand), database operations (refresh, checkmark, close), and a 'Limit to 1000 rows' dropdown. The query text is as follows:

```

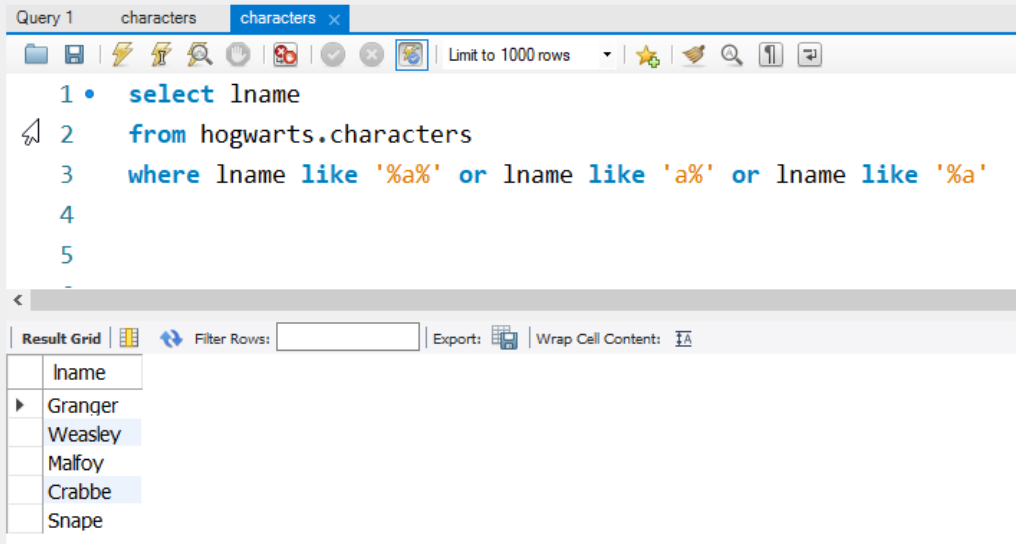
1 • delete
2 from hogwarts.characters
3 where char_id = 11
4
5
6

```

Result:

[illegible]

12. Выведите фамилию всех персонажей, которые содержат в ней букву 'a'
(Print the last name of all the characters that contain the letter 'a' in it)



The screenshot shows a SQL query editor with the following query:

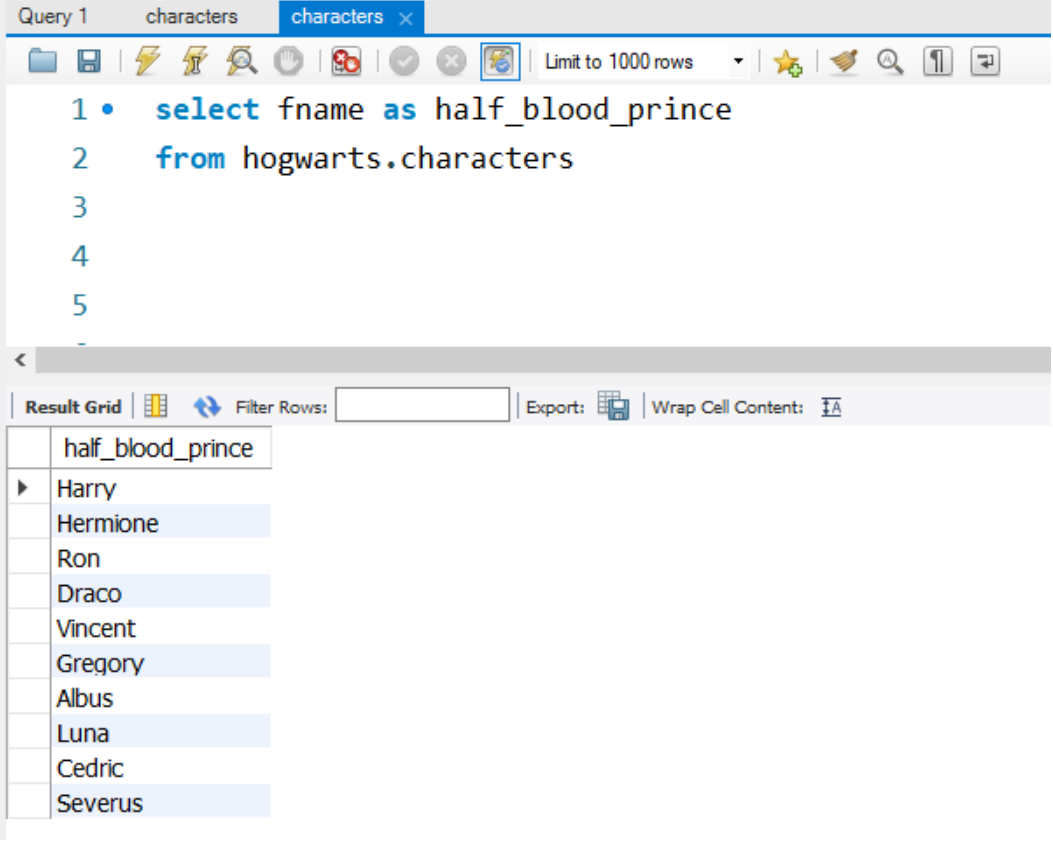
```
1 • select lname
2 from hogwarts.characters
3 where lname like '%a%' or lname like 'a%' or lname like '%a'
4
5
```

Below the query editor, the results are displayed in a table with the following data:

lname
Granger
Weasley
Malfoy
Crabbe
Snape

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

(Use an alias to temporarily replace the name of the fname column with Half-Blood Prince for a real half-blood prince)



The screenshot shows a SQL query editor with a query named 'Query 1' in the 'characters' table. The query is:

```
1 • select fname as half_blood_prince
2   from hogwarts.characters
3
4
5
```

Below the query editor is a 'Result Grid' showing the results of the query. The grid has one column labeled 'half_blood_prince' and ten rows of names:

half_blood_prince
Harry
Hermione
Ron
Draco
Vincent
Gregory
Albus
Luna
Cedric
Severus

14. Выведите id и имена всех патронусов в алфавитном порядке, при условии что они есть или известны (Output the IDs and names of all patronuses in alphabetical order, provided that they exist or are known)

Query 1 characters characters

Limit to 1000 rows

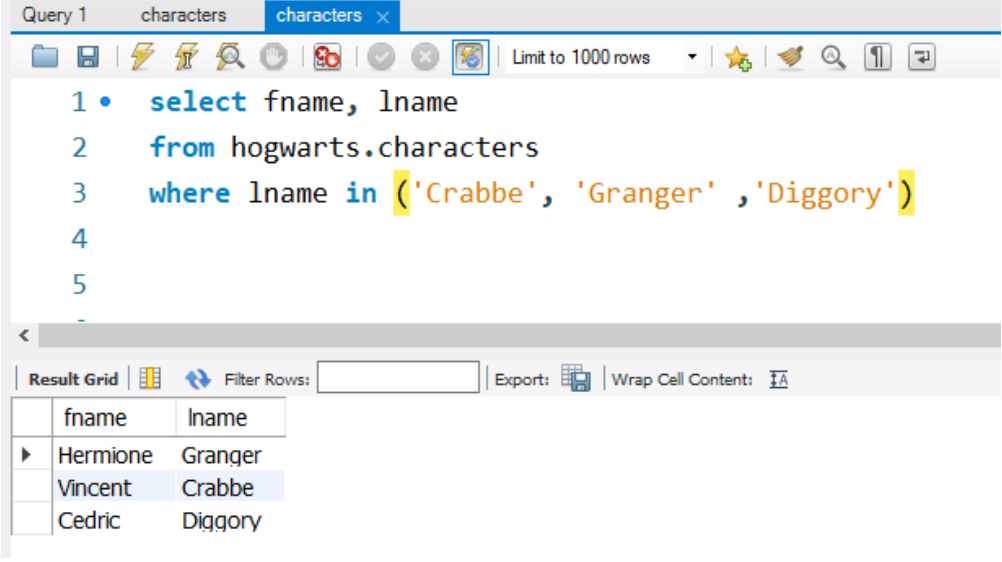
```
1 • select char_id, patronus
2 from hogwarts.characters
3 where patronus is not null
4 order by patronus ASC
5
```

Result Grid

	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

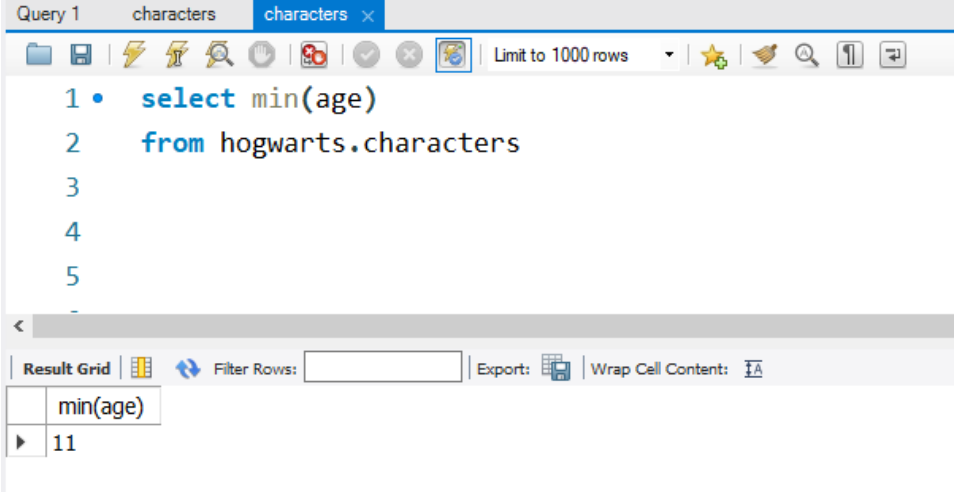
(Using the IN operator, output the name and surname of those characters whose last name is Crabbe, Granger or Diggory)



```
1 • select fname, lname
2   from hogwarts.characters
3  where lname in ('Crabbe', 'Granger', 'Diggory')
4
5
```

fname	lname
Hermione	Granger
Vincent	Crabbe
Cedric	Diggory

16. Выведите минимальный возраст персонажа
(Output the minimum age of the character)



```
1 • select min(age)
2   from hogwarts.characters
3
4
5
```

min(age)
11

17. Используя оператор [UNION](#) выберите имена из таблицы characters и названия книг из таблицы library
(Using the UNION operator, select names from the characters table and book titles from the library table)

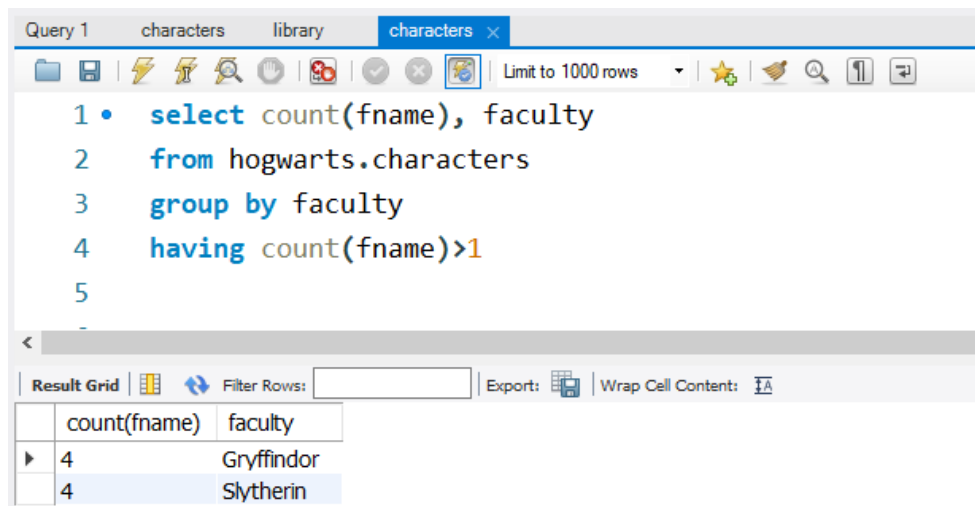
The screenshot shows a database query editor with a query window and a results grid. The query window contains the following SQL code:

```
1 • select fname from hogwarts.characters
2 union
3 select book_name from hogwarts.library
4
5
```

The results grid displays the output of the query, showing a list of names and book titles. The first column is labeled 'fname'.

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

18. Используя оператор HAVING посчитайте количество персонажей на каждом факультете, оставив только те факультеты, где количество студентов больше 1
(Using the HAVING operator, count the number of characters in each faculty, leaving only those faculties where the number of students is greater than 1)



The screenshot shows a database query editor with a tab labeled 'characters'. The SQL query is as follows:

```
1 • select count(fname), faculty
2   from hogwarts.characters
3   group by faculty
4   having count(fname)>1
5
```

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

count(fname)	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 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

(Using the CASE statement, describe the following logic:

Print the character's first and last name, as well as the following text message:

If the faculty is Gryffindor, then Godric should be displayed in the console

If the faculty is Slytherin, then Salazar should be displayed in the console

If the faculty is Ravenclaw, then Rowena should be displayed in the console

If the faculty is Hufflepuff, then Helga should be displayed in the console

If there is other information, then Muggle is output

For the message, use the alias Founders)

Query 1 characters library characters x

Limit to 1000 rows

```

1 • select fname,lname,faculty,
2   case
3     when faculty = 'Gryffindor' then 'Godric'
4     when faculty = 'Slytherin' then 'Salazar'
5     when faculty = 'Ravenclaw' then 'Rowena'
6     when faculty = 'Hufflepuff' then 'Helga'
7     else 'Muggle'
8   end as founders
9 from hogwarts.characters

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

	fname	lname	faculty	founders
▶	Harry	Potter	Gryffindor	Godric
	Hermione	Granger	Gryffindor	Godric
	Ron	Weasley	Gryffindor	Godric
	Draco	Malfoy	Slytherin	Salazar
	Vincent	Crabbe	Slytherin	Salazar
	Gregory	Goyle	Slytherin	Salazar
	Albus	Dumbledore	Gryffindor	Godric
	Luna	Lovegood	Ravenclaw	Rowena
	Cedric	Diggory	Hufflepuff	Helga
	Severus	Snape	Slytherin	Salazar

20. Используя регулярное выражение найдите фамилии персонажей, которые не начинаются с букв H, L или S и выведите их
(Using a regular expression, find the names of characters that do not begin with the letters H, L or S and print them)

Query 1 characters library characters x

Limit to 1000 rows

```

1 • select lname
2   from hogwarts.characters
3  where lname not like 'H%' and lname not like 'L%' and lname not like 'S%'
4
5

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

	lname
▶	Potter
	Granger
	Weasley
	Malfoy
	Crabbe
	Goyle
	Dumbledore
	Diggory