

1. What types of information does Firefox manage using SQLite? Briefly explain the contents of two or three databases.

Firefox uses SQLite to manage user information such as content preferences, cookies, bookmarks etc.

***cookies.sqlite:* Includes information like url, date of last accessed, and a binary variable that reveals whether the website is secure or not.**

***places.sqlite:* Includes information about the websites visited, bookmarks made etc. There's detailed information in each table such as date created and date last accessed.**

2. In what database and tables are your bookmarks stored? Why do you think Firefox stores the title and url separately?

Bookmarks are stored in places.sqlite in the moz_bookmarks table (names of bookmarks) and moz_places table (url of bookmarks). Firefox stores title and url separately because when you pull up a bookmark, you only interact with the titles of the bookmarks and don't see the urls because they're put in the backend.

3. Write an SQL statement that selects your bookmarks. For each one, display only the title, url, date added (as an integer), and visit count.

```
Select moz_bookmarks.title, moz_places.url, moz_bookmarks.dateAdded,
moz_places.visit_count
From moz_bookmarks
Join moz_places on moz_bookmarks.id = moz_places.id;
```

	title	url	dateAdded	visit_count
1		https://www.mozilla.org/privacy/firefox/	1644423201817000	1
2	menu	https://www.mozilla.org/en-US/privacy/firefox/	1644423201817000	1
3	toolbar	https://support.mozilla.org/en-US/products/firefox	1644423201817000	0
4	tags	https://support.mozilla.org/en-US/kb/customize-firefox-...	1644423201817000	0
5	unfiled	https://www.mozilla.org/en-US/contribute/	1644423201817000	0
6	mobile	https://www.mozilla.org/en-US/about/	1644423201841000	0
7	Mozilla Firefox	https://www.mozilla.org/en-US/firefox/central/	1644423202138000	0
8	Get Help	https://www.google.com/search?client=firefox-b-1-d&q=hm	1644423202138000	1
9	Customize Firefox	https://www2.hm.com/en_us/index.html	1644423202138000	1
10	Get Involved	https://www2.hm.com/en_us/women.html	1644423202138000	1
11	About Us	https://www.google.com/search?client=firefox-b-1-...	1644423202138000	1
12	Getting Started	https://www.aritzia.com/	1644423202189000	1
13	Women's Fashion Boutique Aritzia US	https://www.aritzia.com/us/en/default?country=us	1644424283431000	1
14	Women's Clothing & Fashion Women's Clothes H&M US	https://www.google.com/search?client=firefox-b-1-...	1644424288986000	1
15	YouTube	https://www.youtube.com/	1644424299007000	1

4. Write an SQL statement that lists the base domain, name, and value for each of your cookies in order of expiration date.

```
Select host, name, value, expiry
From moz_cookies
Order by expiry;
```

	host	name	value	expiry
1	.hm.com	_gat_GA_GLOBAL	1	1644424314
2	.hm.com	_gat_GA_LOCAL	1	1644424314
3	.aritzia.com	_gat_UA-22696419-4	1	1644424337
4	www.google.com	DV	8_fukUwLCEms8D1GDcTKiA9DbDf17Vd_Q3x9eM9cVwE...	1644424896
5	.youtube.com	CONSISTENCY	AGDxDpQct_LkfNGyyhZ6L3dhBTj_S7uLmZQn74BpGrUc...	1644424899
6	.youtube.com	GPS	1	1644426097
7	.hm.com	ak_bmsc	8F6DC164B0BD78290795DDA1ACD95A0F~0000000000...	1644431450
8	.hm.com	bm_sv	CA42E6CC55F28062D88BAA01FCEA50E5~VVI7/7Ug/...	1644431451
9	.hm.com	bm_sz	D3DA5C21FAA3604C1A6373A0F8229840~YAAQLU5OaO...	1644438651
10	.hm.com	_gid	GA1.2.1822410674.1644424254	1644510655
11	nuanceus.hm.com	cobrowse_10006533	{"auth":0}	1644510656
12	.aritzia.com	_gid	GA1.2.581757254.1644424278	1644510690
13	www2.hm.com	hm-us-favourites	""	1645029052
14	.aritzia.com	AritziaSiteCookie	Aritzia_US us en_US	1647016278
15	.aritzia.com	__cq_seg	0~0.00!1~0.00!2~0.00!3~0.00!4~0.00!5~0.00!6~0.00!...	1647016280
16	.google.com	1P_JAR	2022-02-09-16	1647016296
17	www.aritzia.com	dwanonymous_2229be5ea6f3843440b278529e0389ad	bcHKq4uCspTnraimBkQQuWxWfq	1659976275

5. Write an SQL statement to show how many cookies you have for each domain. Note that you will need to use the "count" function instead of sum.

```
Select host, COUNT(host)
From moz_cookies
Group by host;
```

	host	COUNT(host)
1	.aritzia.com	7
2	.cquotient.com	1
3	.google.com	4
4	.hm.com	12
5	.youtube.com	4
6	accounts.google.com	1
7	nuanceus.hm.com	4
8	www.aritzia.com	2
9	www.google.com	1
10	www2.hm.com	2

6. What are the top five movies since the year 2000, in terms of adjusted gross income?

```
Select title, adjusted
From movie
Where year >= 2000
Limit 5;
```

	title	adjusted
1	Avatar	801.5
2	Marvel's The Avengers	621.79
3	The Dark Knight	591.31
4	Shrek 2	564.14
5	Spider-Man	552.66

7. What are the title, author, and year of books from Russia in the top 100?
(For convenience, you can right-click the results and "Copy Rows as CSV.")

I right-clicked but "Copy Rows as CSV." did not show up.

```
Select title, author, year
From book
Limit 100;
```

title	author	year
Things Fall Apart	Chinua Achebe	1958
Fairy tales	Hans Christian Andersen	1835?37
The Divine Comedy	Dante Alighieri	1265?1321
Epic of Gilgamesh	Anonymous	18th ? 17th century BCE
Book of Job	Anonymous	6th ? 4th century BCE
One Thousand and One Nights	Anonymous	700?1500
Nj?l's Saga	Anonymous	13th century

Pride and Prejudice	Jane Austen	1813
Le Père Goriot	Honoré de Balzac	1835
Molloy, Malone Dies, The Unnamable, a trilogy	Samuel Beckett	1951?53
The Decameron	Giovanni Boccaccio	1349?53
Ficciones	Jorge Luis Borges	1944?86
Wuthering Heights	Emily Brontë	1847
The Stranger	Albert Camus	1942
Poems	Paul Celan	1952
Journey to the End of the Night	Louis-Ferdinand Celine	1932
Don Quixote	Miguel de Cervantes	1605 (part 1), 1615 (part 2)
The Canterbury Tales	Geoffrey Chaucer	14th century
Stories	Anton Chekhov	1886
Nostromo	Joseph Conrad	1904
Great Expectations	Charles Dickens	1861
Jacques the Fatalist	Denis Diderot	1796
Berlin Alexanderplatz	Alfred Döblin	1929
Crime and Punishment	Fyodor Dostoevsky	1866
The Idiot	Fyodor Dostoevsky	1869
The Possessed	Fyodor Dostoevsky	1872
The Brothers Karamazov	Fyodor Dostoevsky	1880
Middlemarch	George Eliot	1871
Invisible Man	Ralph Ellison	1952
Medea	Euripides	431 BCE

Absalom, Absalom!	William Faulkner	1936
The Sound and the Fury	William Faulkner	1929
Madame Bovary	Gustave Flaubert	1857
Sentimental Education	Gustave Flaubert	1869
Gypsy Ballads	Federico Garc?a Lorca	1928
One Hundred Years of Solitude	Gabriel Garc?a M?rquez	1967
Love in the Time of Cholera	Gabriel Garc?a M?rquez	1985
Faust	Johann Wolfgang von Goethe	1832
Dead Souls	Nikolai Gogol	1842
The Tin Drum	G?nter Grass	1959
The Devil to Pay in the Backlands	Jo?o Guimar?es Rosa	1956
Hunger	Knut Hamsun	1890
The Old Man and the Sea	Ernest Hemingway	1952
Iliad	Homer	850?750 BCE
Odyssey	Homer	8th century BCE
A Doll's House	Henrik Ibsen	1879
Ulysses	James Joyce	1922
Stories	Franz Kafka	1924
The Trial	Franz Kafka	1925
The Castle	Franz Kafka	1926
Shakuntala	K?lid?sa	1st century BCE ? 4th century CE
The Sound of the Mountain	Yasunari Kawabata	1954

Zorba the Greek	Nikos Kazantzakis	1946
Sons and Lovers	D. H. Lawrence	1913
Independent People	Halldór Laxness	1934?35
Poems	Giacomo Leopardi	1818
The Golden Notebook	Doris Lessing	1962
Pippi Longstocking	Astrid Lindgren	1945
A Madman's Diary	Lu Xun	1918
Children of Gebelawi	Naguib Mahfouz	1959
Buddenbrooks	Thomas Mann	1901
The Magic Mountain	Thomas Mann	1924
Moby-Dick	Herman Melville	1851
Essays	Michel de Montaigne	1595
History	Elsa Morante	1974
Beloved	Toni Morrison	1987
The Tale of Genji	Murasaki Shikibu	11th century
The Man Without Qualities	Robert Musil	1930?32
Lolita	Vladimir Nabokov	1955
Nineteen Eighty-Four	George Orwell	1949
Metamorphoses	Ovid	1st century CE
The Book of Disquiet	Fernando Pessoa	1928
Tales	Edgar Allan Poe	19th century
In Search of Lost Time	Marcel Proust	1913?27
The Life of Gargantua and of Pantagruel	François Rabelais	1532?34
Pedro Páramo	Juan Rulfo	1955

Masnavi	Rumi	1258?73
Midnight's Children	Salman Rushdie	1981
Bostan	Saadi	1257
Season of Migration to the North	Tayeb Salih	1966
Blindness	Jos? Saramago	1995
Hamlet	William Shakespeare	1603
King Lear	William Shakespeare	1608
Othello	William Shakespeare	1609
Oedipus the King	Sophocles	430 BCE
The Red and the Black	Stendhal	1830
Tristram Shandy	Laurence Sterne	1760
Confessions of Zeno	Italo Svevo	1923
Gulliver's Travels	Jonathan Swift	1726
War and Peace	Leo Tolstoy	1865?1869
Anna Karenina	Leo Tolstoy	1877
The Death of Ivan Ilyich	Leo Tolstoy	1886
Adventures of Huckleberry Finn	Mark Twain	1884
Ramayana	Valmiki	3rd century BCE ? 3rd century CE
Aeneid	Virgil	29?19 BCE
Mahabharata	Vyasa	4th century BCE ? 4th century CE
Leaves of Grass	Walt Whitman	1855
Mrs Dalloway	Virginia Woolf	1925
To the Lighthouse	Virginia Woolf	1927

Memoirs of Hadrian	Marguerite Yourcenar	1951
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8. What are the names and symbols of the periodic elements with an atomic mass of more than 280? Display the results from lightest to heaviest.

```
Select name, symbol
From periodic
Where mass > 280
Order by mass;
```

	name	symbol
1	Ununtrium	Uut
2	Ununbium	Uub
3	Ununpentium	Uup
4	Ununquadium	Uuq
5	Ununhexium	Uuh
6	Ununoctium	Uuo

9. Which of the top 15 songs were featured in the top 100 movies? (Hint: Figure out how to join the two tables, and then use AND clauses to filter by rank.)

```
Select song.title
From song
Join movie on song.film = movie.title
Where song.rank < 16;
```

	title
1	Mrs.Robinson
2	When You Wish upon a Star
3	Stayin' Alive
4	The Sound of Music
5	The Man That Got Away
6	People
7	My Heart Will Go On

