Laboratory Work #5

Please write SQL queries for the following tasks and save them as a `lab5.sql` file.

1. Create a database called `library_db`.
2. Create the following tables `members`, `borrowings`, and `librarians` with the provided structure and data.

Table: members

member_id	member_name	city	membership_level	librarian_id
1001	John Doe	New York	1	2001
1002	Alice Johnson	California	2	2002
1003	Bob Smith	London	1	2003
1004	Sara Green	Paris	3	2004
1005	David Brown	New York	1	2001
1006	Emma White	Berlin	2	2005
1007	Olivia Black	Rome	3	2006

Table: borrowings

borrowing_id	borrow_date	return_date	member_id	librarian_id	book_id
30001	2023-01-05	2023-01-10	1002	2002	5001
30002	2022-07-10	2022-07-17	1003	2003	5002
30003	2021-05-12	2021-05-20	1001	2001	5003
30004	2020-04-08	2020-04-15	1006	2005	5004
30005	2024-02-20	2024-02-30	1007	2006	5005
30006	2023-06-02	2023-06-12	1005	2001	5001

Table: librarians

librarian_id	name	city	commission
2001	Michael Green	New York	0.15
2002	Anna Blue	California	0.13
2003	Chris Red	London	0.12
2004	Emma Yellow	Paris	0.14
2005	David Purple	Berlin	0.12
2006	Laura Orange	Rome	0.13

3. Select the total number of borrowings made by all members over the past 5 years (from 2020 to 2024).

4. Select the average membership level of all members.

5. Select how many members are from 'New York'.

6. Select the earliest borrowing date from the `borrowings` table.

7. Select the member name and city of all members whose name ends with the letter 'n'.

8. Select all borrowings managed by librarians from 'Paris' between the dates '2021-01-01' and '2023-12-31'.

9. Select all borrowings where the `borrow_date` is after '2023-01-01'.

10. Select the total number of books borrowed by each member.

11. Select all members who have a membership level of 3.

12. Select the librarian with the highest commission.