**Day # 3 Assignments**

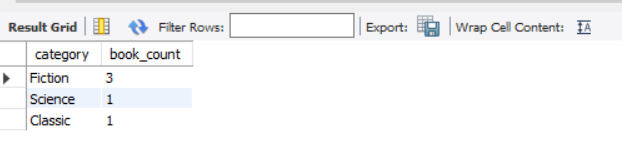
**Task / Problems**:

1. List the various categories and count of books in each category.

SELECT category, COUNT(\*) AS book\_count

FROM books

GROUP BY category;



**-- 2) List the book\_No and the number of times the book is issued in the descending order of count.**

SELECT book\_no, COUNT(\*) AS issue\_count

FROM issue

GROUP BY book\_no

ORDER BY issue\_count DESC;

A screenshot of a computer

Description automatically generated

**-- 3) Find the maximum, minimum, total and average cost amount in the books table.**

SELECT MAX(cost) AS max\_cost\_amount FROM books;

A screen shot of a computer

Description automatically generated

SELECT MIN(cost) AS min\_cost\_amount FROM books;

A screenshot of a computer

Description automatically generated

SELECT SUM(cost) AS total\_cost\_amount FROM books;

A white background with black text

Description automatically generated

SELECT AVG(cost) AS avg\_cost\_amount FROM books;

A close-up of a computer screen

Description automatically generated

-- 4) Display the member id and the no of books for each member that has issued more then 2 books.

SELECT member\_id, COUNT(\*) AS issued\_books\_count

FROM issue

GROUP BY member\_id

HAVING issued\_books\_count > 2;

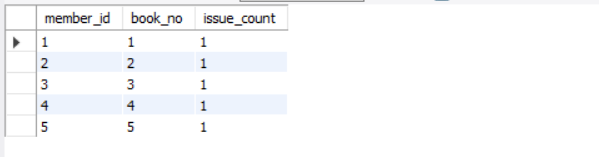
-- 5) Display the member id, book no and no of times the same book is issued by the member in the descending order of count.

SELECT member\_id, book\_no, COUNT(\*) AS issue\_count

FROM issue

GROUP BY member\_id, book\_no

ORDER BY issue\_count DESC;



-- 6) Display the month and no of books issued each month in the descending order of count.

SELECT DATE\_FORMAT(issue\_date, '%Y-%m') AS issue\_month, COUNT(\*) AS books\_issued\_count

FROM issue

GROUP BY issue\_month

ORDER BY books\_issued\_count DESC;

A close-up of a computer screen

Description automatically generated

-- 7) List the book\_no of all the books that are not issued to any member so far.

SELECT b.book\_no

FROM books b

LEFT JOIN issue i ON b.book\_no = i.book\_no

WHERE i.book\_no IS NULL;

-- 8) List all the member id that exist in member table and has also at least one book issued by them.

SELECT DISTINCT m.member\_id

FROM member m

INNER JOIN issue i ON m.member\_id = i.member\_id;

A screenshot of a computer

Description automatically generated

-- 9) List the member ID with highest and lowest no of books issued.

SELECT member\_id, COUNT(\*) AS issued\_books\_count

FROM issue

GROUP BY member\_id

ORDER BY issued\_books\_count DESC

LIMIT 1; -- Highest

UNION

SELECT member\_id, COUNT(\*) AS issued\_books\_count

FROM issue

GROUP BY member\_id

ORDER BY issued\_books\_count ASC

LIMIT 1; -- Lowest



-- 10) List all the Issue\_details for books issued in December and July without using any arithmetic, Logical or comparison operator.

SELECT \*

FROM issue

WHERE MONTH(issue\_date) IN (12, 7);

-- 11) List the Book\_No, Book\_Name and Issue\_date for all the books that are issued in month of December and belong to category Database.

SELECT b.book\_no, b.book\_name, i.issue\_date

FROM books b

INNER JOIN issue i ON b.book\_no = i.book\_no

WHERE MONTH(i.issue\_date) = 12

AND YEAR(i.issue\_date) = YEAR(CURRENT\_DATE()) -- This year's December

AND b.category = 'Database';

-- 12) List the Member Id, Member Name and No of books Issued in the descending order of the count.

SELECT m.member\_id, m.member\_name, COUNT(i.book\_no) AS books\_issued\_count

FROM member m

LEFT JOIN issue i ON m.member\_id = i.member\_id

GROUP BY m.member\_id, m.member\_name

ORDER BY books\_issued\_count DESC;

A screenshot of a computer

Description automatically generated