Task 4 : Aggregate Functions & Grouping

1. **Using Aggregate Functions**

Select COUNT(\*) AS TotalBooks from Book;

Select AVG(PublicationYear) AS AvgPublicationYear from Book;

Select CategoryID, AVG(PublicationYear) AS AvgYear from Book

Group By CategoryID;

Select MIN(PublicationYear) AS EarliestYear from Book;

Select MAX(PublicationYear) AS LatestYear from Book;

1. **Using Group By**

Select AuthorID, COUNT(\*) AS BooksWritten from BookAuthor

Group By AuthorID;

Select CategoryID, COUNT(\*) AS BooksInCategory from Book

Group By CategoryID;

Select CategoryID, MAX(PublicationYear) AS maxPublicationYear

From Book

Group By CategoryID

Having MAX(PublicationYear) >= 2010;

Select BranchID, COUNT(\*) AS TotalCopies from BookCopy

Group By BranchID;

Select Status, COUNT(\*) AS TotalCopies from BookCopy

Group By Status;

Select MemberType, COUNT(\*) AS TotalMembers from Member

Group By MemberType;

Select BranchID, COUNT(\*) AS TotalCopies from BookCopy

Group By BranchID

Having COUNT(\*) > 2;

Select CategoryID, COUNT(\*) AS BookCount from Book

Group By CategoryID

Having COUNT(\*) > 1;

Select CategoryID, AVG(PublicationYear) AS avgPublicationYear from Book

Group By CategoryID

Having AVG(PublicationYear) > 1995;