**MySql\_Examination\_queries**

**Task- 1:**

Create two tables: users and orders.

Each user can have multiple orders.

Write a SQL query to fetch the names of users along with the total number of orders they have placed.

**Query:**

select user\_name, count(orders.order\_id) as total\_orders

left join orders on users.user\_id = orders.user\_id

group by users.user\_id, users.user\_name;

**Task-2:**

You are working with a database that stores information about students and their courses. There are three tables: students, courses, and enrollments.

Write a SQL query to display the names of students along with the courses they have enrolled in.

**Query:** select students.student\_name, courses.course\_name from students

join enrollments on students.student\_id = enrollments.student\_id

join courses on enrollments.course\_id = courses.course\_id;

**Task-3:**

You need to retrieve data from a database that tracks product sales. There are tables for products, sales, and customers.

Write a SQL query to show the total sales amount for each product category.

**Query:** select products.category, sum(sales.quantity\*products.price) as total\_sales from products

left join sales on products.product\_id = sales.product\_id

group by products.category;

**Task-4:**

You have a database containing information about employees in a company.

Write a SQL query to list the names of employees along with their respective managers' names.

**Query** : select e.employee\_name as employee,

m.employee\_name as manager

from employees e

left join employees m on e.manager\_id = m.employee\_id;

**Task-5:**

You are managing a database for an online store.

Write a query to retrieve the top 10 bestselling products based on the total number of units sold.

**Query:**

select product\_id,

sum(quantity\_sold) AS total\_units\_sold

from sales1

group by product\_id

order by total\_units\_sold desc limit 10;

**Task-6:**

You have tables for students, courses, and grades.

Write a SQL query to display the average grade for each student.

**Query:**

select student\_id, avg(grade) as average\_grade

from grades group by student\_id;

**Task-7:**

You are working with a database for a social media platform.

Write a query to show the users who have the most friends.

**Query:**

Select u.user\_name from users u

Join friends f on u.user\_id = f.friend\_id

Order by f.count desc limit 3;

**Task-8:**

You have tables for employees and departments.

Write a query to display the department names along with the total number of employees in each department.

**Query:**

Select dep\_name from departments join employees on

departments.dep\_name = employees.dep\_name

group by dep\_name;

**Task-9:**

You need to retrieve data from a database tracking product inventory.

Write a query to display products with low stock (less than 10 units).

**Query:**

select \* from products where quantity < 10;

**Task-10:**

You have tables for customers and orders.

Write a query to show the average order value for each customer.

**Query:**

select customer\_id, customer\_name, avg(order\_value) from customers

join orders on customers.customer\_id = orders.customer\_id

group by customer\_id;

**Task-11:**

In a database storing movie information,

Write a query to show the top 5 highest-rated movies by users.

**Query:**

select m.title, avg(r.rating) as average\_rating

from movies m

join ratings r on m.movie\_id = r.movie\_id

group by m.movie\_id

order by average\_rating desc

limit 5;

**Task-12:**

You have tables for invoices and payments.

Write a query to show the unpaid invoices and their total amount

**Query:**

select \* from invoices where invoice\_id not in (select invoice\_id from payments);