Command Type	Example Query
Select All Columns	SELECT * FROM employees;
Select Specific Columns	SELECT employee_ID, first_name, last_name FROM employees;
Filter by a Single Condition	SELECT * FROM employees WHERE hourly_pay > 20.00;
Filter by Multiple Conditions	SELECT * FROM employees WHERE hourly_pay > 20.00 AND joining_date > '2020-01-01';
Filter by NULL Values	SELECT * FROM employees WHERE hourly_pay IS NULL;
Sort by Single Column (Ascending)	SELECT * FROM employees ORDER BY hourly_pay;
Sort by Single Column (Descending)	SELECT * FROM employees ORDER BY hourly_pay DESC;
Sort by Multiple Columns	SELECT * FROM employees ORDER BY last_name, first_name;
Count Rows	SELECT COUNT(*) FROM employees;
Find the Average Hourly Pay	SELECT AVG(hourly_pay) FROM employees;
Sum of Hourly Pay	SELECT SUM(hourly_pay) FROM employees;
Maximum and Minimum Hourly Pay	SELECT MAX(hourly_pay) AS max_pay, MIN(hourly_pay) AS min_pay FROM employees;
Group by a Single Column	SELECT joining_date, COUNT(*) FROM employees GROUP BY joining_date;
Group by Multiple Columns	SELECT last_name, first_name, COUNT(*) FROM employees GROUP BY last_name, first_name;
Group with Aggregate Functions	SELECT joining_date, AVG(hourly_pay) FROM employees GROUP BY joining_date;
Filter Groups with HAVING	SELECT joining_date, AVG(hourly_pay) FROM employees GROUP BY joining_date HAVING AVG(hourly_pay) > 20.00;
Inner Join	SELECT employees.employee_ID, employees.first_name, employees.last_name, departments.department_name FROM employees INNER JOIN departments ON employees.department_id = departments.department_id;
Left Join	SELECT employees.employee_ID, employees.first_name, employees.last_name, departments.department_name FROM employees LEFT JOIN departments ON employees.department_id = departments.department_id;
Subquery in SELECT	SELECT employee_ID, first_name, last_name, (SELECT department_name FROM departments WHERE departments.department_id = employees.department_id) AS department_name FROM employees;
Subquery in WHERE	SELECT employee_ID, first_name, last_name FROM employees WHERE hourly_pay > (SELECT AVG(hourly_pay) FROM employees);
Replace NULL with Default Value	SELECT employee_ID, first_name, last_name, IFNULL(hourly_pay, 15.00) AS hourly_pay FROM employees;
Combine Results with UNION	SELECT first_name, last_name FROM employees WHERE department_id = 1 UNION SELECT first_name, last_name FROM employees WHERE department_id = 2;
Column Aliases	SELECT employee_ID AS id, first_name AS fname, last_name AS lname FROM employees;
Table Aliases	SELECT e.employee_ID, e.first_name, e.last_name, d.department_name FROM employees e INNER JOIN departments d ON e.department_id = d.department_id;
Limit the Number of Results	SELECT * FROM employees LIMIT 10;
Offset and Limit	SELECT * FROM employees LIMIT 10 OFFSET 20;
Using LIKE for Pattern Matching	SELECT * FROM employees WHERE first_name LIKE 'A%';
Using IN for Multiple Values	SELECT * FROM employees WHERE department_id IN (1, 2, 3);
Combining AND, OR, and NOT	SELECT * FROM employees WHERE (hourly_pay > 20.00 AND joining_date > '2020-01-01') OR last_name = 'Smith';