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a. SELECT A.user-id,
       name,
       COUNT(login-date) AS login-count
FROM users AS A
LEFT JOIN logins AS B
ON A.user-id = B.user-id
GROUP BY A.user-id, name
ORDER BY login-count DESC;

```

user-id	name	login-count
2	Gloria	2
3	Steve	1
1	Nelson	0

```

10. SELECT A.teacher-id,
      teacher-name,
      COALESCE(subject-name, 'No Subject Assigned')
      AS subject-name
FROM teachers AS A
LEFT JOIN subjects AS B
ON A.teacher-id = B.teacher-id
ORDER BY teacher-name ASC;

```

teacher-id	teacher-name	subject-name
3	Mr. Dlamini	No Subject Assigned
1	Mr. Hlongwane	Math
1	Mr. Hlongwane	Science
2	Ms. Ndaba	No Subject Assigned


```

5. SELECT A.region-id,
           region-name,
           Sum(amount) AS total-sales
FROM regions AS A
LEFT JOIN sales AS B
ON A.region-id = B.region-id
GROUP BY A.region-id, region-name;

```

region-id	region-name	total-sales
1	North	2000
2	South	3500
3	East	NULL

```

6. SELECT A.student-id,
           name,
           days-present,
           CASE WHEN days-present >= 15 THEN 'Excellent'
                WHEN days-present BETWEEN 6 AND 14 THEN
                    'Needs Improvement'
                WHEN days-present <= 5 THEN 'Poor Attendance'
                ELSE 'No Record'
           END AS attendance-status
FROM students AS A
LEFT JOIN attendance AS B
ON A.student-id = B.student-id;

```

Student-id	name	days-present	attendance-status
1	Alice	18	Excellent
2	Bob	5	Poor Attendance
3	Charlie	NULL	No Record


```

1. SELECT A.project,
      name,
      COUNT(task-id) AS task-count
FROM projects AS A
INNER JOIN tasks AS B
ON A.project-id = B.project-id
GROUP BY A.project-id, name;

```

project-id	name	task-count
1	AI Chatbot	2
2	Website	1

```

5. SELECT COALESCE(A.cust-id, B.cust-id) AS
      cust-id,
      order-total,
      return-total,
      CASE WHEN return-total IS NOT NULL
            THEN 'Returned'
            ELSE 'No Return'
      END AS return-status
FROM orders AS A
FULL OUTER JOIN returns AS B
ON A.cust-id = B.cust-id
WHERE order-total > 100;

```

cust-id	order total	return total	return status
11	120	20	Returned
12	250	NULL	No Return
13	180	NULL	No Return

Since cust-id 14 has order-total that is NULL, it's not returned in the Output table?

Exercise 4 - JOINS

1. SELECT A.student_id,
student_name,
grade
FROM students AS A
INNER JOIN grades AS B
ON A.student_id = B.student_id;

student_id	student_name	grade
2	Bob	B
3	Charlie	A

2. SELECT A.emp_id,
emp_name,
dept_name
FROM employees AS A
LEFT JOIN departments AS B
ON A.emp_id = B.emp_id;

emp_id	emp_name	dept_name
1	John	NULL
2	Lisa	HR
3	Mike	NULL

3. SELECT COALESCE (A.product_id, B.product_id) AS
product_id,
product_name,
quantity
FROM products AS A
FULL OUTER JOIN sales AS B

ON A.product_id = B.product_id;

Product_id	Product_name	quantity
1	Laptop	NULL
2	Mouse	50
3	Keyboard	NULL
4	NULL	30

4. SELECT order_id,
A.customer_id,
amount,
customer_name,
CASE WHEN B.customer_id IS NOT NULL THEN
 'Returning Customer'
ELSE 'New Customer'
END AS customer_type
FROM orders AS A
LEFT JOIN customers AS B
ON A.customer_id = B.customer_id;

order_id	customer_id	amount	customer_name	customer_type
1	101	500	Paul	Returning Customer
2	102	300	Sarah	Returning Customer
3	105	0	NULL	New Customer