Joins questions. Question 1

① SELECT student-id, students_name, grade
FROM Students As A
Inner Join grades As B
ON A. Students = B. Students;

outcome→

Student-id	Student-name	grade
2	Bob	B
3	Charlie	A

② SELECT emp-id, emp-name, dept-name
FROM Employees As A
LEFT Join department As B
On A. emp_id = B. emp_id;

outcome→

emp-id	emp-name	dept-name
1	John	Null
2	lisa	HR
3	Mike	~~False~~ Null

③ SELECT product-id, product_name, quantity
FROM products As A
FULL outer Join Sales As B
ON A. product-id = B. product_id;

outcome→

Product-id	product-name	quantity
1	laptop	Null
2	Mouse	50
2	Mouse	50
3	keyboard	Null
4	Null	30

④ SELECT order_id, customer_id, amount, customer_name
CASE
WHEN customer_id IS NULL THEN 'New customer'
ELSE 'Returning customer'
END AS customer_type
FROM orders AS A
LEFT Join ~~customer_id = customers~~ AS B
ON A.customer_id = B.customer_id;

order_id	customer_id	Amount	customer_name	customer_type
1	101	500	Paul	Returning cust
2	102	300	sarah	Returning cust
3	105	0	Null	New customer

⑤ SELECT region_id, region_name, ~~total_sales~~ SUM(amount) AS total_sales
FROM region 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_sale
1	North	2000
2	South	3500
3	East	Null

⑥ SELECT 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	day_Present	attendance_status
1	Alice	18	Excellent
2	BoB	5	Poor Attendance
3	Charlie	Null	No Record

⑦ SELECT projects-id, name, COUNT(task-id) AS task-cont
FROM projects AS A
INNER Join task AS B
ON. A.projects-id = B.projects-id
GROUP BY A.projects-id, name;

Projects	Name	task-cont
1	AI chatbot	2
2	Lebsio	1

⑧ 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-id5
WHERE >100 = order-total;

Cust-id	order-id	return-total	return-status
11	120	20	Returned
12	250	Null	No return
13	180	Null	No return

9) SELECT user_id, name
   count (login_date) As login_count
   FROM USERS AS A
   LEFT Join login AS B
   ON A.user_id = B.user_id
   GROUP BY A.user_id, name
   GROUP BY login_count DESC;

USER_id	Name	login_count
2	Gloria	2
3	Steve	1
1	Nelson	0

10) SELECT teacher_id, teacher_name
    COALESCE (subject_name, 'No subject Assigned') As subject_name
    FROM teachers AS A
    LEFT JOIN subject AS B
    ON A.teacher_id = B.teacher_id
    ORDER BY teacher_name ASC;

teacher_id	teacher_name	Subject_name
1	Mr. Hlongwe	Math
1	Mr. Hlongwe	Science
2	Ms Ndaba	No subject Assigned
3	Mr. Dlamini	No subject Assigned