

(SQL Joins)

Question 1

```
SELECT 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

✓

Question 2

```
SELECT emp-ID, emp-name, department
FROM employees AS A
LEFT JOIN department AS B
ON A.employees = A.emp-ID = B.emp-ID
```

emp-ID	emp-name	dept-name
1	John	Null
2	Lisa	HR
3	Mike	Null

✓

3) Question 3

```
SELECT Product-ID, Product-name, quantity
FROM Products AS A
Full outer join Sales AS B
ON A.Product-ID = B.Product-ID
```

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Product-ID	Product-Name	Quantity
1	Laptop	Null
2	mouse	50
3	keyboard	Null
4	Null	30

✓

Question 4

```

SELECT order-ID, customer-ID, amount, customer-ID
Case
  WHEN Price = 0 THEN "New Customer"
  WHEN Price > 0 THEN "Returning 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	Customername	Customer-type
1	101	500	Paul	Returning
2	102	300	Sarah	returning
3	105	0	Null	New

✓

Question 5

```

SELECT region-ID, region-name
  & Sum (amount) AS total-Sales
FROM Sales AS A
LEFT Join regions AS B
  & ON A.region-ID = B.region-ID

```

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Region-ID	Region-Name	Total-Sales
1	North	2000
2	South	3500
4	Null	1000

Question 6

```

SELECT Student-ID, Name, days-present
CASE
  WHEN day-present < 10 THEN "Poor attendance"
  WHEN day-present BETWEEN 10 AND 15 THEN "needs Improvement"
  ELSE "Excellent" END AS attendance-status
FROM Student AS A
LEFT JOIN Attendance AS B
ON Student-ID = B.Student-ID

```

Student-ID	Name	days-present	Attendance-status
1	Alice	18	Excellent
2	Bob	5	Poor Attendance
3	Charlie	Null	Null

Question 7

```

SELECT SELECT Project-ID, Name
COUNT(task-ID) AS task-count
FROM Projects AS A
tasks AS B
ON task-ID Project-ID = B.Project-ID
GROUP BY A.Project-ID, Name

```

Project-ID	Name	task
1	AI chatbot	2
2	Website	1

Question 8

SELECT Cusb-ID, order-total, A Return-total

CASE

WHEN return-total is \neq is not Null Then "returned"

ELSE "No Return"

FROM Order AS A

Full Outer Join returns AS B

ON A.Cusb-ID = B.Cusb-ID

WHERE order-total > 100

Cusb-ID	Order-total	Return-total	Return-Status
11	120	20	returned
12	250	Null	No return
13	180	Null	No return

Question 9

SELECT 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 logincount DESC

User-ID	name	login-count
2	Gloria	2
3	Steve	1
1	Nelson	0

Question 10

```
SELECT teacher-ID, teacher name, Subject-name
CASE
WHEN
COALESCE (Subject-name, "No Subject Assigned")
AS Subject-name
FROM teacher AS A
LEFT JOIN Subject AS B
ON A.teacher-ID = B.teacher-ID
Order By teacher-name ASC
```

teach

teacher-ID	teacher-name	Subject-name
3	Mr Dlamini	No Subject Assigned
1	Mr Hlongwane	Maths
1	Mr Hlongwane	Science
2	Mr Ndaba	No Subject Assigned