

Exercise 4 SQL Joins

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

2. Select emp_id, emp_name, dept_name

From Employee 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	Milce	Null

3. Select Product_id, product_name, quantity

From products AS A

Full Outer Join 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, Customer-Id, amount, Customer-Id

CASE

When amount ≤ 300 Then 'New Customer'

Else 'returning Customer'

End If Customer-type

From Orders As A

Left Join Customers As B

ON A.Customer-Id = B.Customer-Id;

Order-Id Customer-Id amount Customer-type

1 101 1500 Paul returning Customer

2 102 300 Sarah New Customer

3 105 0 Null New Customer

Select region_id, region_name, total_sales
Sum(amount) AS total_sales
From regions AS A
left join sales AS B
ON A.region_id = B.region_id
Group by region_name

region_id	region_name	total_sales
1	North	2000
2	South	3506
3	East	Null

6.

Select Student-id, name, days-present

CASE

When days-present < 10 Then 'poor attendance'
When days-present Between 10 AND 15 Then

'Needs Improvement'

The 'Excellent', end as Attendance_Status

From Students as A

Left Join Attendance as R

ON A.Student-id = R.Student-id

Student-id	Name	days-present	Attendance_Status
1	Alice	18	Excellent
2	Bob	5	Poor - attendance
3	Charlie	Null	Null

7.

Select Project-id, name,
Count Task-id As task-Count

From projects As A

Inner join tasks As R

A.project-id = B.project-id

Group by project-id;

Project-id name Task-Count

1 AJ Chatbot 7

2 Website 1

8. Select Cust-id, Order-total, return-total

CASE

When return-total = 'Null' Then 'No return'

Else 'Returned'

From Return AS R

Full Outer Join AS R

ON A.Cust-id = B.Cust-id

Where Order-total > 100.

Cust-id	Order-total	return-total	return_Status
11	120	0	No returned
12	250	Null	No return
13	180	Null	No return

q. 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 User-id

Order By login_Count Desc.

User-id	Name	Login Count
2	Storia	2
3	Steve	1
1	Melton	0

10. Select teacher_id, teacher_name

CASE
When Subject-name IS Null Then 'No Subject
Assigned'

else Subject-name
End q5 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	No Subject Assigned
3	Mr. Dlamini	Math	
1	Mr. Hlongwane	Science	
2	Mr. Mdqaq	No Subject Assigned	