

### Exercise 4

1. Select student id, student name, grade  
From students

As an 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 employees AS a left join departments  
 AS B on A emp\_id = B emp\_id

Emp_id	emp name	Department
1	John	null
2	Lisa	HR
3	Mike	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

Product id	product name	Quantity
1	Laptop	Null
2	Mouse	50
3	keyboard	Null
4	Null	50

4. Select order\_id, customer\_id, amount, customer name  
 From orders AS a left join customers  
 AS B on A customer\_id = B customer\_id  
~~Case~~  
 Custo



Order id	customer id	customer name	Amount
1	101	Paul	500
2	102	Salah	300
3	103	null	0

5. ~~Select, region\_id, sum (amount) as total sales  
From sales  
Group by region\_id~~

5. Select, region\_id, sum (amount) as total sales  
From sales AS a left join region  
~~Left join~~ AS B on A.region\_id = B.region\_id  
Group by region\_id,  
Order by region\_id,

Region	Region name	total sales
1	North	2000
2	South	3500

6. Select student\_id, name, days\_present  
From students as a left join attendances  
AS B on A.student\_id = B.student\_id  
Case

when days\_present < 5 then 'Poor attendance'  
when days\_present is between 5-10 then 'Needs improvement'

When days\_present is equal to 19 or greater than 19 then 'Excellent'

End as attendance status



Student id	Name	Days present	Attendance
1	Alice	15	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 ~~project~~ <sup>tasks</sup> as B on project A  
 project\_id = B project id  
 Group by project id, name;

Project <del>name</del> id	Name	task count
1	AI chatbot	2
2	Website	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 ~~to~~ 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



9. 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 log\_count DESC;

User_id	name	Login_count
2	Gloria	2
3	Steve	1
1	Nelson	0

10. Select A.teacher\_id, A.teacher name, B.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