

Exercise 6 - Advanced SQL

Question 1

Select employee_id, name,

COALESCE (salary, 0) AS salary_with_default
from employee;

employee_id	name	department	salary
1	Alice	IT	3000
2	Bob		0
3	Charlie		7000
4	Dana		0

Question 2

Select employee_id,

name,

COALESCE (department, 'Not Assigned') AS
department_name

from employee;

employee_id	name	department
1	Alice	HR
2	Bob	IT
3	Charlie	Not assigned
4	Dana	Finance

Question 3

select order_id, customer_id
 from orders
 ISAI where ISAI customer_id ISNULL

order_id	customer_id
103	NULL

Question 4.

select order_id, customer_id,
 COALESCE (delivery_date, 'Pending') AS
 delivery_status

from orders;

order_id	customer_id	delivery_status
101	201	2024-12-01
102	202	Pending
103	NULL	2024-12-03

Question 5

select student_id, name,
 COALESCE (grade, 0)
 from students;

student_id	name	grade
1	Ethain	85
2	Maiya	0
3	Olivia	90

Question 6

Select Count(*) As NotGradedCount
from Students
where grade IS NULL;

Not-graded-count

1

Question 7

Select product_id , name,
price - COALESCE (discount , 0) AS final_price
from products

product_id	name	finalprice
S01	Keyboard	25
S02	mouse	15
S03	monitor	45

Question 8

Select Count(*) As missing_email_count
from customers

where email ISNULL;

missing_email_count

2

Question 9.

select customer_id, name,

Coalesce (email, 'No email') as email_display
from customers;

customer_id	name	email_display
1	Unde	Noemail
2	Joseph	Joseph@email.com
3	Nicola	Noemail

Question 10

select payment_id, status,

Coalesce (method, 'Unknown') as method_display
from payments;

payment_id	method_display	status
301	credit	Null
302	Paypal	success
303	unknown	failed

Question 11

select item_id, item_name,

Coalesce (quantity, 0) as quality_checked
from inventory;

Item_id	item_name	quality-checked.
1	Pen	ISO
2	notebook	ISO
3	Eraser	0

Question 12.

Select emp_id,
 Coalesce (bonus, Commission) as first_available_reward
 from Employee_Extra

emp_id	first-available_reward
1	300
2	100
3	0

13. Select Count(*) as noRoomCount,
 from classes
 where room ISNULL;

noRoomCount
2.

14. Select student_id, date,
 Coalesce (status, 'Not Marked') as attendance_Status from Attendances;

student-id	date	attendance status
1	2025-04-01	Not Marked
2	2025-04-01	Presented
3	2025-04-01	Present

Question 15

Select account-id, ~~account-type~~, ~~balance~~, ~~balance-checked~~
 Coalesce (account-type, 'Unknown') AS display,
 Coalesce (balance, 0) AS balance-checked

account-id	type	display	balance checked
A1	avings	0	
A2	current	5000	
A3	unknown	2000	

Question 16

Select project-id, title,

Coalesce (state-date, 'TBD') AS start-display
 From projects

project-id	title	start-display
1	Website Revamp	2025-01-10
2	mobile APP	TBD
3	Data Migration	TBD

Question 17

select review-id, product-id
 Coalesce (comment, 'No comment') as
 Comment-display,
 Coalesce (rating, 0) as rating-display
 from reviews;

Review-id	product-id	comment-display	rating-display
1	SO1	Circuit Product	4
2	SO2	No comment.	0
3	SO3	works fine	3

Question 18

Select supplier-id, name,
 Coalesce (contt.phone, 'No contact')
 as contact-number
 from suppliers;

Supplier-id	name	contact-number
1	Global Ecom	123456789
2	Best Supplies	987654321
3	ValueSource	0

Question 19

Select user-id,
 Coalesce (theme, 'Light') As theme-set,
 Coalesce (language, 'English') As language-set,
 Coalesce (timezone, 'UTC') As timezone-set
 from user-settings;

user-id	theme-set	language-set	timezone-set
1	light	english	UTC
2	Dark	English	UTC+1
3	light	english	UTC

Question 20

Select
 record-id,
 machine-id
 Coalesce (issue , 'unknown issue') as issue-log,
 Coalesce (technician , 'Not Assigned') as
 technician-name
 from maintenance ;

record-id	machine-id	issue-log	technician-name
1	M101	overheating	Not Assigned
2	M102	unknown issue	Not assigned
3	M102	Jammed	Alex