

Exercise: NULL Functions

Table 1: Employees

Q1

```
Select employees_id,  
      name,  
      COALESCE (salary, 0) AS salary_with_default  
From employees;
```

employee_id	Name	salary_with_default
1	Alice	5000
2	Bob	0
3	Charlie	7000
4	Dana	0

Q2

```
Select name,  
      employees_id,  
      COALESCE (department, 'not assigned') AS department_name  
From employees;
```

employee_id	Name	department_name
1	Alice	HR
2	Bob	IT
3	Charlie	not_assigned
4	Dana	Finance

Table 3: Students

Q5

Select Student_id,
 name,
~~COALESCE~~(grade, 0) AS Final_grade
 From Students;

Student_id	Name	Final_grade
1	Ethan	85
2	Maya	0
3	Olivia	90

Q6

Select Count(*) AS Not_graded_Count
 From Students
 Where grade IS NULL;

Not_graded_Count
1

Table 4: Products

Q7

Select Product_id,

Name,

COALESCE(Price, 'discount', 0) AS Final Price

FROM Products;

Product_id	Name	Final Price
S01	key board	25
S02	Mouse	10
S03	Monitor	100

Table 5: Customers

Q8

Select COUNT(*) AS Missing_email_Count

FROM Customers

Where email is NULL;

Missing_email_Count
2

Q9

Select customer_id, name,

COALESCE(email, 'no email') AS email_display

from Customers;

Customer_id	Name	Email_Display
1	Linda	no email
2	Joseph	joseph@mail.com
3	Nia	no email

Table 6: Payments

Q10

Select Paymentid,
 Status,
 $\text{COALESCE}(\text{method}, \text{'Unknown'})$ AS method_display
 From Payments;

Payment_id	Method_display	Status
301	Credit	NULL
302	PayPal	Success
303	Unknown	Failed

Table 7: Inventory

Q11

Select Item_id,
 Item_name,
 $\text{COALESCE}(\text{quantity}, 0)$ AS quantity_checked
 From Inventory;

Item_id	Item_name	quantity_checked
1	Pen	0
2	Notebook	50
3	Eraser	0

Table 8: Employees_Extra

Q12

Select EMP_ID,
 COALESCE(bonus, commission) AS first_available_reward
 FROM Employees_Extra;

EMP_ID	first_available_reward
1	300
2	100
3	Null

Table 9: Classes

Q13

Select COUNT(*) AS no_room_Count

FROM Classes

Where room IS Null;

no_room_Count
2

Table 10: Attendance

Q14

Select Student-ID,

Date,

COALESCE(status, 'Not Marked') AS attendance_Status

From Attendance

Student-ID	Date	attendance_Status
1	2025-04-01	Not Marked
2	2025-04-01	Present
3	2025-04-01	Absent- Not Marked

Table 11: Bank Accounts

Q15

Select account_id

COALESCE (account-type, 'unknown') AS type_display;

COALESCE (balance, 0) AS balance_checked

FROM Bank_Accounts;

account_id	type_display	balance_checked
A1	Savings	0
A2	Current	5000
A3	Unknown	2000

Table 12: Projects

Q16

Select project_id,

title

COALESCE (start_date, 'TBD') AS start_display

FROM Projects;

Project_id	Title
1	Website Redesign 2025-01-10
2	Mobile APP TBD
3	Data Migration TBD

Table 13: Reviews

Q17

Select review_id,
 Product_id,
 $\text{COALESCE}(\text{comment}, \text{'no comment'})$ AS comment_display,
 $\text{COALESCE}(\text{rating}, 0)$ AS rating_display
 from Reviews;

review_id	Product_id	comment_display	rating_display
1	S01	Great Product	4
2	S02	No Comment	0
3	S03	Works Fine	3

Table 14: Suppliers

Q18

Select supplier_id,
 name,
 $\text{COALESCE}(\text{Phone}, \text{alt phone}, \text{'No contact})$ AS contact_number
 from Suppliers;

supplier_id	name	contact_number
1	Global goods	123456789
2	Best Supplies	987654321
3	ValueSource	No Contact

Table B: user-settings

Q19

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

Table 18: Maintenance

Q20

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	M03	Jammed	Alex