

Exercise: NULL functions

Question 1

// Show all employees with their salary. if salary is NULL, display 0.

```
SELECT employee_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

Question 2

// Show employee names with their department, If department is NULL, show Not Assigned

```
SELECT employee_id, name, COALESCE(department, 'Not Assigned')
    AS department-name,
FROM Employees;
```

employee_id	name	department_name
1	Alice	HR
2	Bob	IT
3	charlie	Not Assigned

Question 3

*// Find orders with NULL customer-id using IS NULL

```
SELECT order-id, customer-id  
FROM orders  
WHERE ISNULL(customer-id);
```

order-id	customer-id
103	NULL

Question 4

*// show all orders, IF delivery-date is NULL. Show 'Pending'.

```
SELECT order-id, customer-id, COALESCE(delivery-date, 'Pending')  
As delivery-st  
FROM orders;
```

order-id	customer-id	delivery-status
101	201	2024-12-01
102	202	Pending
103	NULL	2024-12-03

Question 5

*// show all students and their grades. Replace NULL with 0

```
SELECT Student-id, name, COALESCE(grade, 0) As final-grade  
FROM Students;
```

Student-id	name	Final-grade
1	Ethan	85
2	Marya	0
3	Olivia	90

Question 6

*/// count students who haven't been graded//.

SELECT COUNT(*) AS not-graded-count

FROM students

WHERE grade IS NULL;

Not-graded-count
1

Question 7

*Show product name, price and final price After discount (assume 0 if discount is Null)

SELECT product-id, name, price - COALESCE(discount, 0) AS
final-price

FROM Products;

product_id	name	Final-price
501	keyboard	25
502	Mouse	10
503	Monitor	100

Question 8

*/// count how many customers have no email

SELECT COUNT(*) AS missing_email-count

FROM customers

WHERE email IS NULL;

missing-email-count
2

Question 9

// show all customers with email. if NULL, display 'No Email' //

```
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@email.com
3	Nia	No Email

Question 10

// show payment details with method replaced by 'unknown' if NULL

```
SELECT Payment-id, COALESCE (method, 'unknown') AS method-display,  
status  
FROM Payments;
```

payment_id	Method-display	status
301	Credit	NULL
302	Paypal	Success
303	Unknown	Failed

Question 11

// show items and their quantity (0 if NULL)

```
SELECT item-id, item-name, COALESCE (quantity, 0)  
AS quantity-checked  
FROM Inventory;
```


item_id	item_name	quantity-checked
1	pen	0
2	Notebook	150
3	Eraser	0

Question 12

*/ show employee ID & first available value among bonus or commission
 SELECT emp-id, COALESCE (bonus, commission) AS first-available-
 reward
 FROM Employees-Extra;

emp-id	first-available-reward
1	300
2	100
3	Null

Question 13

*/ count classes that dont have room assigned.
 SELECT COUNT(*) AS no-room-count
 FROM classes
 WHERE room IS NULL;

no-room-count
2

Question 14

*/ show attendance records with status. Replace Null with
 "Not Marked";

```
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

Question 15

*// show account ID, account_type (or 'unknown') & balance (or 0)

```
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

Question 16

*// show all projects with a start date. If start_date is Null,
display 'TBD'.

```
SELECT project_id, title, COALESCE(start_date, 'TBD') As start_display
From Projects;
```

Question 20

*// show maintenance log with

```
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	M103	Jammed	Alex

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

project-id	Title	start-display
1	website Revamp	2025-01-10
2	Mobile App	TBD
3	Data Migration	TBD

Question 17

*// Display reviews showing comment (or 'No comment') & rating (or 0)

```
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	S01	Great product	4
2	S02	No comment	0
3	S03	Works fine	3

Question 18

*// show the supplier contact number. use COALESCE (phone, alt-phone, 'no contact')

```
SELECT supplier-id, name, COALESCE (phone, alt-phone, 'no contact')
      As contact-number
```

From Suppliers;

supplier-id	name	contact-number
1	Global Goods	123456789
2	Best Supplies	987654321
3	ValueSource	No contact