

Exercise: Null Functions

Q1 SELECT employee-id,
name,
IFNULL(Salary, 0) AS Salary-with default
FROM Employees;

employee-id	name	salary-with default
1	Alice	0
2	Bob	5000
3	Charlie	0
4	Bob	7000

Q2 SELECT employee-id
name,
CASE WHEN department IS NULL THEN 'Not Assigned'
ELSE department
END AS department-name
FROM Employees;

employee-id	name	department-name
1	Alice	HR
2	Bob	IT
3	Charlie	Not assigned
4	Dana	Finance

Q3 SELECT order-id,
customer-id
FROM Orders
WHERE customer-id IS NULL;

order-id	customer-id
103	NULL

Q4 SELECT order-id,
customer-id,
CASE WHEN delivery-date IS NULL THEN 'Pending'
ELSE delivery-date AS VARCHAR
END AS delivery-status
FROM orders;

order-id	customer-id	delivery-status
101	201	Pending
102	202	2024-12-01
103	NULL	2024-12-02

Q5 SELECT student-id,
name,
IFNULL (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

Q7 SELECT name,
price
IFNULL (Price, 0) AS final-price
FROM Students;

product-id	name	final-price
501	Keyboard	0
502	Mouse	10
503	Monitor	0

Q8 SELECT COUNT(*) AS missing-email-count
FROM customers
WHERE email IS NULL;

missing-email-count
2

Q9 SELECT customer-id
IFNULL (email, 'no email') AS email-display
FROM customers;

customer-id	name	email-display
1	Linda	no email
2	Joseph	Joseph@gmail.com
3	Nia	No email

Q10 SELECT payment-id,
IF NULL (method, 'unknown') AS method-display-status
FROM payments;

payment-id	Method	Method-Display-status
301	Credit	NULL
302	Paypal	Success
303	Unknown	Failed

Q11 SELECT item-id,
item-name
IFNULL (quantity, 0) AS quantity-checked
FROM Inventory;

item-id	Item-name	quantity-checked
1	Pen	0
2	Notebook	150
3	Erasor	0

Q12 SELECT emp-id,
IFNULL (bonus ~~OR~~ Commission) AS first-available-reward
IFNULL (Commission) AS first-available reward
FROM Employees-Extra;

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

Q13 SELECT COUNT(*) AS no-room-count
FROM Classes
WHERE room IS NULL;

no-room-count
2

Q14 SELECT student-id,
date
IF NULL (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

Q15 SELECT *
 IF NULL (account_type, 'unknown') AS type_display
 IF NULL (balance, 0) AS balance_checked
 FROM bank_accounts;

Account-id	type_display	balance_checked
A1	Savings	0
A2	Current	5000
A3	Unknown	2000

Q16 SELECT *
 IF NULL (start_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

Q17 SELECT review-id,
 product-id,
 IF NULL (comment, 'no comment') AS comment_display
 IF NULL (rating, 0) AS rating_display
 FROM Reviews;

Review-id	product-id	comment_display	rating_display
1	501	Great product	4
2	502	No comment	0
3	503	Works fine	3

Q18 SELECT supplier-id,
 name,
 COALESCE (phone, alt_phone, 'no contract') AS contract-number
 FROM suppliers;

Supplier-id	name	contract-number
1	Global Goods	123456789
2	Best Supplies	987654321
3	Value Source	No contract

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SELECT user-id,
IF NULL (theme, 'light') AS theme-set,
IF NULL (language, 'English') AS language-set,
IF NULL (time zone, 'UTC') AS time zone-set
FROM User-settings;

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user-id	theme-set	language-set	Timezone-set
1	Light	English	UTC
2	Dark	English	UTC+1
3	Light	English	UTC

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SELECT record-id,
machine-id,
IF NULL (issue, 'unknown-issue') AS issue-log,
IF NULL (technician, 'not assigned') AS technician-name
FROM Maintenance;

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Record-id	machine-id	issue-log	technician-name
1	M101	Overheating	Not-assigned
2	M102	unknown-issue	Not-assigned
3	M103	Jammed	Alex