

Exercise 6: NULL Functions

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SQL FUNCTIONS

Question 1

SELECT employee-id,
name,

COALESCE (Salary, 0) AS salary-with-default

FROM employees;

employee- <u>id</u>	name	salary-with-default
1	Alice	5000
2	Bob	0
3	Charlie	7000
4	Dana	0

Question 2

SELECT employee-id,
name,

COALESCE (department, 'Not assigned') AS department-name

FROM employees;

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

Question 3

SELECT order-id,
customer-id

FROM orders

WHERE customer-id IS NULL;

order- <u>id</u>	customer- <u>id</u>
101	201
102	202
103	NULL

Question 4

SELECT Order-od,
customer-od,
~~customer-od~~
IS NULL (CONVERT(NVARCHAR, delivery-date), 'Pending') AS delivery-status.
FROM Orders;

Order-od	customer-od	delivery-status
101	201	2024-12-01
102	202	Pending
103	Null	2024-12-03

Question 5

SELECT Student-od
name,
IS NULL (grade, 0) AS final-grade
FROM Students;

Student-od	name	final-grade
1	Ethan	85
2	Maya	0
3	Olivia	90

Question 6

SELECT COUNT(*) AS not-graded
FROM Students
WHERE grade IS NULL

not-grades-count
1

Question 7

SELECT product-od,
name,
price - COALESCE (discount, 0) As final-price

From Products;

product-od	name	final-price
501	keyboard	25
502	Mouse	10
503	Monitor	100

Question 8

SELECT COUNT (*) As missing-email-count

From customers

Where email IS NULL;

missing-email-count
2

Question 9

SELECT customer-od

name,

COALESCE (email, 'No email') As email-display

From customers;

Customer-od	name	email-display
1	hinda	No email
2	Joseph	joseph@gmail.com
3	Moe	No email

Question 10

SELECT payment-od
COALESCE (method, 'unknown') As method-display,
status

From payments;

Payment-od	method-display	Status
301	Credit	FAIL
302	Pay Pal	Success
303	Unknown	FAILED

Question 11

SELECT item-od,
item-name,
COALESCE (quantity, 0) AS quantity
FROM Inventory;

item-od	item-name	Quantity checked
1	Pen	0
2	Notebook	150
3	Eraser	0

Question 12

SELECT emp-od,
COALESCE (bonus, commission) AS first-available-reward
FROM employee-extra;

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

Question 13

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

no-room-count
2

Question 14

SELECT Student-od,
date,
COALESCE (status, 'Not Marked') AS attendance-status
FROM Attendance

Student-od	date	Attendance-status
1	2025-04-01	Not Marked
2	2025-04-1	Present
3	2025-04-01	Absent

Question 15
SELECT account-od,

CONCAT(account-type, 'Unknown') AS type-display,
CONCAT(balance, 0) AS balance-checked

FROM Bank-Accounts;

accounts-od	type-display	balance-checked
A1	Savings	0
A2	Current	5000
A3	Unknown	2000

Question 16

SELECT project-od,
title,

CONCAT(TO_CHAR(start-date 'yy-yy-mm-dd'), 'TBD') AS start-display

FROM Projects

project-od	title	start display
1	website revamp	2025-01-10
2	Mobile App	TBD
3	Data Migration	TBD

Question 17

SELECT review-od,
product-od,

CONCAT(comment, 'No comment') AS comment-display,

CONCAT(rating, 0) AS rating-display

FROM reviews;

review-od	product-od	comment-display	rating-display
1	501	Great product	4
2	502	No comment	0
3	503	works fine	3

Question 18

SELECT Supplier-od,
name,

COALESCE (phone, alt-phone, 'No comment') As contract-number

From Suppliers;

Supplier-od	name	contract-number
1	Global goods	123456789
2	Best Suppliers	987654321
3	ValueSource	No contact

Question 19

SELECT user-od,

COALESCE (theme, 'light') As theme-set,

COALESCE (language, 'English') As language-set,

COALESCE (timezone, 'UTC') As timezone-set

From user-settings;

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

Question 20

SELECT record-od,
machine-od,

COALESCE (issue, 'Unknown Issue') As issue-log,

COALESCE (technical, 'Not Assigned') As technical name

From maintenance;

record-od	machine-od	issue-log	technical name
1	M101	Overheating	Not assigned
2	M102	Unknown issue	Not assigned
3	M103	Fammed	Alex