

Exercise 6: NULL Functions

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TSQL Functions

Question 1

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

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
4	Dana	Finance

Question 3

SELECT order_id,
customer_id

From orders

WHERE customer_id IS NULL;

Order - id	Customer - id
101	201
102	202
103	NULL

QUESTION 4

SELECT Order_id,
 customer_id,
~~Customer~~
 ISNULL (convert(MARCA, delivery-status), 'Pending') AS delivery_Status
 FROM Orders;

Order_id	customer_id	delivery_Status
101	201	2024-12-01
102	202	Pending
103	None	2024-12-03

Question 5

SELECT Student_id
 name,
 ISNULL (grade, 0) AS final_grade
 FROM Students;

Student_id	name	final_grade
1	Ethan	85
2	maya	0
3	Olwua	90

Question 6

SELECT COUNT(*) AS not_graded
 FROM Students
 WHERE grade IN NULL

not-grades-count
1

Question 7

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

From Products;

product- <u>id</u>	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-id

name,

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

From customers;

customer- <u>id</u>	name	email - display
1	Winda	No email
2	Joseph	joseph@gmail.com
3	Moe	No email

Question 10

SELECT payment-id

COALESCE (method, 'unknown') AS method-display,

status

From payments;

payment- <u>id</u>	method-display	status
301	Credit	NULL
302	Pay Pal	Success
303	Unknown	FAILED

Question 11

SELECT item-od,
item-name,

COUNT(*) AS quantity

FROM Inventory;

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

Question 12

SELECT emp-od,

COUNT(*) 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,

COUNT(*) AS attendance-status

FROM Attendance

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

SELECT account_id,
 COALESCE(account_type, 'Unknown') AS type_display,
 COALESCE(balance, 0) AS balance_checked
 FROM Bank_Accounts;

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

Question 16

SELECT project_id,
 title,
 COALESCE(ID_CHAR(Start_date 'yy yy-mm-dd'), '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	501	Great product	4
2	502	No comment	0
3	503	Works fine	3

Question 18

SELECT supplier-id,
name,
contact-set (phone, alt-phone, 'No contact') AS contact-number
FROM suppliers;

supplier- <u>id</u>	name	contact-number
1	Global goods	123 456 789
2	Best Suppliers	987 654 321
3	ValueSource	No contact

Question 19

SELECT user-id,
theme-set (theme, 'light') AS theme-set,
language-set (language, 'English') AS language-set,
timezone-set (timezone, 'UTC') AS timezone-set
FROM user-settings;

user- <u>id</u>	theme-set	language-set	timezone-set
1	light	English	UTC
2	Dark	English	UTC +1
3	Wight	English	UTC

Question 20

SELECT record-id,
machine-id,
issue-set (issue, 'Unknown Issue') AS issue-log,
technician-set (technician, 'Not Assigned') AS technician-name
FROM maintenance;

record- <u>id</u>	machine- <u>id</u>	issue-log	technician-name
1	M 101	Overheating	Not assigned
2	M 102	Unknown issue	Not assigned
3	M 103	Jammed	Alex