

Exercise 6 (Null functions)

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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	Dang	0

```

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	Dany	Finance

```

(4) SELECT order - id,
           customer - id
CASE
    WHEN delivery-date IS NULL THEN
        'Pending'

```

ELSE delivery-date
 END AS delivery-status
 FROM Orders;

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

③ SELECT order_id,
 customer_id
 FROM Orders
 WHERE customer_id IS NULL;

order id	customer id
103	NULL

⑤ 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

⑥ SELECT COUNT(*) AS not-graded-count
 FROM Students
 WHERE grade is NULL

Not-graded-count
<u>1</u>

⑦ SELECT product-id,
 name,
 price - (COALESCE(discount, 0))
 AS final-price
 FROM ~~product~~ products ;

Product id	Name	final-price
501	key board	25
502	Mouse	10
503	Monitor	100

⑧ ~~SELECT customer-id,
 name,~~

SELECT COUNT(*) AS missing-email-count
 FROM Customers
 WHERE email is NULL ;

missing_email - count
2

(9) 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

(10) SELECT payment_id,
 (COALESCE(method, 'Unknown')) AS
 method - display, status
 FROM payments;

Payment id	Method - display	Status
301	Credit	NULL
302	Pay Pal	Success
303	Unknown	Failed

(11) 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

(12) SELECT emp-id
 (COALESCE(bonus, commission)) AS
 first-available-reward
 FROM employees - Extra ;

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

(13) SELECT (COUNT(*)) AS no-room-count
 FROM classes
 WHERE room is NULL ;

no-room-count
2

(14) 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

(15) 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

(16) SELECT project_id,
 title,
 COALESCE(start_date, 'TBD') AS
 start_display
 FROM Projects;

(14) 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

(15) SELECT account_id
 (COALESCE(account_type, 'unknown'))
 AS type_display,
 (COALESCE(balance, 0)) AS
~~balance~~ balance_checked
 FROM Bank - Accounts ;

Account_id	Type_display	balance_checked
A1	Savings	0
A2	Current	5000
A3	Unknown	2000

(16) SELECT project_id,
 title,
 (COALESCE(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

(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} display	rating-display
1	501	Great product	4
2	502	No comment	0
3	503	Works fine	3

(18) 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 Supplier	987654321
3	Value Source	No Contact

(9) SELECT user_id
 COALESCE(theme, 'Light')
 AS theme_set,
 COALESCE(language, 'English')
 AS lang-language-set,
 COALESCE(time-zone, 'UTC')
 AS time zone-set
 FROM user_settings;

user_id	theme_set	language-set	timezone-set
1	light	English	UTC
2	Dark	English	UTC
3	light	English	UTC

(20) 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