BrightLight Tutorials

Exercise: Null Functions

Table 1: Employees

Q1.
```sql
SELECT employee_id,
       name,
       IFNULL (salary, 0) AS salary
FROM employees;
```

Output:

employee_id	name	salary
1	Alice	5000
2	Bob	0
3	Charlie	7000
4	Dana	0

Q2.
```sql
SELECT employee_id,
       name,
       IFNULL ( 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

Powered by CamScanner

Table 2 : orders

Q3.
SELECT order_id,
       customer_id
FROM orders
WHERE customer_id IS NULL;

order_id	customer_id
101	
102	
103	

output:

order_id	customer_id
103	NULL

Q4.
SELECT order_id,
       customer_id
       IFNULL (delivery date, 'pending') AS delivery-status

FROM orders;

output:

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

Table 3: Students

Q5.
```sql
SELECT student_Id,
       name,
       IFNULL(grade, 0) AS final_grade
FROM students;
```

Output:

student_Id	name	final_grade
1	Ethan	85
2	Maya	0
3	Olivia	90

Q6.
```sql
SELECT COUNT(grade) AS not_graded_count
FROM students;
```

Output:

not_graded_count
1

Table 4: Products

Q7.
```sql
SELECT product_id,
       name, price,
       price - IFNULL(discount, 0) AS final_price
FROM products;
```

Output:

product_id	name	final_price
501	keyboard	25
502	Mouse	10
503	Monitor	100

~~Table 5~~

Table 5: customers

Q8.
SELECT COUNT(email) AS missing_email_count
~~WHERE ema~~
FROM customers
WHERE email IS NULL;

Output:

missing_email_count
2

Q9.
SELECT customer_id,
       name,
          IFNULL (email, 'NO Email') AS email_display

FROM customers
WHERE email IS NOT NULL;

Output:

customer_id	name	email_display
1	Linda	NO Email
2	Joseph	Joseph@mail.com
3	Nia	NO Email

Table 6 : Payments

Q10.

```sql
SELECT payment_id,
    IFNULL(method, 'unknown') AS method_display,
    status

FROM payments;
```

Output :

payment_id	method_display	status
301	Credit	NULL
302	PayPal	Success
303	unknown	Failed

Table 7 : Inventory

Q11.

```sql
SELECT item_id,
    item_name,
    IFNULL(quantity, 0) AS quantity_checked

FROM inventory;
```

Output :

item_id	item_name	quantity_checked
1	pen	0
2	Notebook	150
3	Eraser	0

Table 8: Employees-Extra

Q12.
SELECT COALESCE emp-id,
                    (bonus, commission) AS
                    first-available-reward

FROM employees-extra;

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

Table 9: classes

Q13.

SELECT COUNT(room) AS no-room-count
~~WHERE room IS NULL~~
FROM classes
WHERE room IS NULL;

output:
no-room-count
2

Table 10: Attendance

Q14.
SELECT student-id,
        date,
        IFNULL (status, 'Not Marked') AS
        attendance-status
FROM attendance;

output:

student_id	date	status
1	2025-04-01	(Not Marked)
2	2025-04-01	Present
3	2025-04-01	Absent

Table 11. Bank-Accounts

Q15.

```sql
SELECT account_id,
    IFNULL(account, 'unknown') AS type-display,
    IFNULL(balance, 0) AS balance-checked
FROM bank-accounts;
```

output:

student_id	type-display	balance-checked
A1	Savings	0
A2	Current	5000
A3	unknown	2000

Table 12. Projects

Q16.

```sql
SELECT project_id,
    title,
    IFNULL(start-date, 'TBD') AS start-display
FROM projects;
```

output:

project_id	title	start-display
1	Website Revamp	2025-01-10
2	Mobile App	TBD
3	Data Migration	TBD

Table 13: Reviews

Q17.

```sql
SELECT review_id,
    product_id,
    IFNULL(comment, 'No Comment') AS comment_display,
    IFNULL(rating, 0) AS rating_display

FROM reviews;
```

output:

review_id	product_id	comment_display	rating_display
1	501	Great product	4
2	502	No comment	0
3	503	works fine	3

Table 14: Suppliers

Q18.

```sql
SELECT supplier_id,
    name,
    COALESCE(phone, alt_phone, 'No contact')
    AS contact_number

FROM suppliers;
```

output:

supplier_id	name	contact_number
1	Global Goods	No contact
2	Best Supplies	987654321
3	ValueSource	No contact

Powered by CamScanner

Table 15: user-settings

Q19.

```sql
SELECT user-id,
    IFNULL (theme, 'Light') AS theme-set,
    IFNULL (language, 'English') AS language-set
    IFNULL (timezone, 'UTC') AS timezone-set

FROM user-settings;
```

Output:

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

Table 16: maintenance

Q20.

```sql
SELECT record-id,
    machine-id,
    IFNULL (issue, 'unknown Issue') AS issue-log,
    IFNULL (technician, 'Not Assigned') AS technician-name

FROM maintanance;
```

output:

record-id	machine-id	issue-log	technician
1	M101	overheating	Not Assigned
2	M102	unknown issue	Not Assigned
3	M103	Jammed	ALEX