**Kalimwabo Emile assignment of DBMS**

**ID:28892**

**Q1. select concat(first\_name,' ',last\_name) as full\_name from employees;**

+----------------+

| full\_name |

+----------------+

| Alice Johnson |

| Bob Smith |

| Carol Adams |

| David Lee |

| Eve Martins |

| Frank Green |

| Grace Brown |

| Hank Wilson |

| Ivy Clark |

| Jake White |

+----------------+

**Q2. select lower(first\_name) from employees;**

+-------------------+

| lower(first\_name) |

+-------------------+

| alice |

| bob |

| carol |

| david |

| eve |

| frank |

| grace |

| hank |

| ivy |

| jake |

+-------------------+

10 rows in set (0.001 sec)

**Q3. select substring(first\_name,1,3) from employees;**

+---------------------------+

| substring(first\_name,1,3) |

+---------------------------+

| Ali |

| Bob |

| Car |

| Dav |

| Eve |

| Fra |

| Gra |

| Han |

| Ivy |

| Jak |

+---------------------------+

10 rows in set (0.001 sec)

Q4**. UPDATE employees**

**-> SET email = REPLACE(email, '@company.com', '@org.com')**

**-> WHERE email LIKE '%@company.com';**

**Query OK, 10 rows affected (0.014 sec)**

**Rows matched: 10 Changed: 10 Warnings: 0**

MariaDB [employee\_management]> **select \* from employees;**

+-------------+------------+-----------+-----------------------+------------+---------+---------------+

| employee\_id | first\_name | last\_name | email | hire\_date | salary | department\_id |

+-------------+------------+-----------+-----------------------+------------+---------+---------------+

| 101 | Alice | Johnson | alice.johnson@org.com | 2015-03-15 | 4500.00 | 1 |

| 102 | Bob | Smith | bob.smith@org.com | 2018-06-23 | 5200.00 | 3 |

| 103 | Carol | Adams | carol.adams@org.com | 2012-09-10 | 6700.00 | 2 |

| 104 | David | Lee | david.lee@org.com | 2020-01-05 | 3800.00 | 4 |

| 105 | Eve | Martins | eve.martins@org.com | 2019-12-11 | 4000.00 | 3 |

| 106 | Frank | Green | frank.green@org.com | 2017-07-08 | 6000.00 | 8 |

| 107 | Grace | Brown | grace.brown@org.com | 2014-11-02 | 4900.00 | 5 |

| 108 | Hank | Wilson | hank.wilson@org.com | 2013-02-17 | 3100.00 | 6 |

| 109 | Ivy | Clark | ivy.clark@org.com | 2021-08-30 | 2700.00 | 9 |

| 110 | Jake | White | jake.white@org.com | 2022-05-19 | 3600.00 | 7 |

+-------------+------------+-----------+-----------------------+------------+---------+---------------+

10 rows in set (0.000 sec)

**Q5. select employee\_id, trim(first\_name),trim(last\_name) from employees;**

+-------------+------------------+-----------------+

| employee\_id | trim(first\_name) | trim(last\_name) |

+-------------+------------------+-----------------+

| 101 | Alice | Johnson |

| 102 | Bob | Smith |

| 103 | Carol | Adams |

| 104 | David | Lee |

| 105 | Eve | Martins |

| 106 | Frank | Green |

| 107 | Grace | Brown |

| 108 | Hank | Wilson |

| 109 | Ivy | Clark |

| 110 | Jake | White |

+-------------+------------------+-----------------+

10 rows in set (0.000 sec)

**6. select employee\_id,first\_name,last\_name,length(concat(first\_name,' ',last\_name)) from employees;**

+-------------+------------+-----------+-------------------------------------------+

| employee\_id | first\_name | last\_name | length(concat(first\_name,' ',last\_name)) |

+-------------+------------+-----------+-------------------------------------------+

| 101 | Alice | Johnson | 14 |

| 102 | Bob | Smith | 10 |

| 103 | Carol | Adams | 12 |

| 104 | David | Lee | 10 |

| 105 | Eve | Martins | 12 |

| 106 | Frank | Green | 12 |

| 107 | Grace | Brown | 12 |

| 108 | Hank | Wilson | 12 |

| 109 | Ivy | Clark | 10 |

| 110 | Jake | White | 11 |

+-------------+------------+-----------+-------------------------------------------+

10 rows in set (0.001 sec)

**Q7. select employee\_id,email,instr(email, '@') from employees;**

+-------------+---------------------------+-------------------+

| employee\_id | email | instr(email, '@') |

+-------------+---------------------------+-------------------+

| 101 | alice.johnson@company.com | 14 |

| 102 | bob.smith@company.com | 10 |

| 103 | carol.adams@company.com | 12 |

| 104 | david.lee@company.com | 10 |

| 105 | eve.martins@company.com | 12 |

| 106 | frank.green@company.com | 12 |

| 107 | grace.brown@company.com | 12 |

| 108 | hank.wilson@company.com | 12 |

| 109 | ivy.clark@company.com | 10 |

| 110 | jake.white@company.com | 11 |

+-------------+---------------------------+-------------------+

**Q8. SELECT**

-> employee\_id,

-> first\_name,

-> last\_name,

-> CONCAT(

-> CASE

-> WHEN first\_name IN ('Alice', 'Carol', 'Eve', 'Grace', 'Ivy') THEN 'Ms. '

-> WHEN first\_name IN ('Bob', 'David', 'Frank', 'Hank', 'Jake') THEN 'Mr. '

-> ELSE ''

-> END,

-> first\_name, ' ', last\_name

-> ) AS titled\_name

-> FROM employees;

+-------------+------------+-----------+-------------------+

| employee\_id | first\_name | last\_name | titled\_name |

+-------------+------------+-----------+-------------------+

| 101 | Alice | Johnson | Ms. Alice Johnson |

| 102 | Bob | Smith | Mr. Bob Smith |

| 103 | Carol | Adams | Ms. Carol Adams |

| 104 | David | Lee | Mr. David Lee |

| 105 | Eve | Martins | Ms. Eve Martins |

| 106 | Frank | Green | Mr. Frank Green |

| 107 | Grace | Brown | Ms. Grace Brown |

| 108 | Hank | Wilson | Mr. Hank Wilson |

| 109 | Ivy | Clark | Ms. Ivy Clark |

| 110 | Jake | White | Mr. Jake White |

+-------------+------------+-----------+-------------------+

10 rows in set (0.002 sec)

**Q9. select upper(project\_name) from projects;**

+---------------------------+

| upper(project\_name) |

+---------------------------+

| HR REVAMP |

| FINANCE AUTOMATION |

| IT INFRASTRUCTURE UPGRADE |

| MARKETING BLITZ 2025 |

| LEGAL COMPLIANCE |

| CUSTOMER PORTAL |

| SALES BOOSTER |

| R&D PILOT |

| PROCUREMENT TRACKER |

| OPERATIONS STREAMLINE |

+---------------------------+

10 rows in set (0.000 sec)

**Q10. select project\_name,replace (project\_name, '-','') from projects;**

+---------------------------+--------------------------------+

| project\_name | replace (project\_name, '-','') |

+---------------------------+--------------------------------+

| HR Revamp | HR Revamp |

| Finance Automation | Finance Automation |

| IT Infrastructure Upgrade | IT Infrastructure Upgrade |

| Marketing Blitz 2025 | Marketing Blitz 2025 |

| Legal Compliance | Legal Compliance |

| Customer Portal | Customer Portal |

| Sales Booster | Sales Booster |

| R&D Pilot | R&D Pilot |

| Procurement Tracker | Procurement Tracker |

| Operations Streamline | Operations Streamline |

+---------------------------+--------------------------------+

10 rows in set (0.000 sec)

**Q11. SELECT**

**-> e.employee\_id,**

**-> CONCAT('Emp: ', e.first\_name, ' ', e.last\_name, ' (', d.department\_name, ')') AS employee\_label**

**-> FROM**

**-> employees e**

**-> JOIN**

**-> department d ON e.department\_id = d.department\_id;**

+-------------+-------------------------------------------+

| employee\_id | employee\_label |

+-------------+-------------------------------------------+

| 101 | Emp: Alice Johnson (Human Resources) |

| 102 | Emp: Bob Smith (Information Technology) |

| 103 | Emp: Carol Adams (Finance) |

| 104 | Emp: David Lee (Marketing) |

| 105 | Emp: Eve Martins (Information Technology) |

| 106 | Emp: Frank Green (Sales) |

| 107 | Emp: Grace Brown (Legal) |

| 108 | Emp: Hank Wilson (Operations) |

| 109 | Emp: Ivy Clark (Research and Development) |

| 110 | Emp: Jake White (Customer Service) |

+-------------+-------------------------------------------+

10 rows in set (0.010 sec)

**Q12. select email,length(email) from employees;**

+---------------------------+---------------+

| email | length(email) |

+---------------------------+---------------+

| alice.johnson@company.com | 25 |

| bob.smith@company.com | 21 |

| carol.adams@company.com | 23 |

| david.lee@company.com | 21 |

| eve.martins@company.com | 23 |

| frank.green@company.com | 23 |

| grace.brown@company.com | 23 |

| hank.wilson@company.com | 23 |

| ivy.clark@company.com | 21 |

| jake.white@company.com | 22 |

+---------------------------+---------------+

10 rows in set (0.001 sec)

**Q12. SELECT**

**-> employee\_id,**

**-> email,**

**-> SUBSTRING\_INDEX(SUBSTRING\_INDEX(email, '@', 1), '.', -1) AS last\_name\_from\_email**

**-> FROM**

**-> employees;**

+-------------+---------------------------+----------------------+

| employee\_id | email | last\_name\_from\_email |

+-------------+---------------------------+----------------------+

| 101 | alice.johnson@company.com | johnson |

| 102 | bob.smith@company.com | smith |

| 103 | carol.adams@company.com | adams |

| 104 | david.lee@company.com | lee |

| 105 | eve.martins@company.com | martins |

| 106 | frank.green@company.com | green |

| 107 | grace.brown@company.com | brown |

| 108 | hank.wilson@company.com | wilson |

| 109 | ivy.clark@company.com | clark |

| 110 | jake.white@company.com | white |

+-------------+---------------------------+----------------------+

10 rows in set (0.001 sec)

**Q14. SELECT**

**-> employee\_id,**

**-> CONCAT(UPPER(last\_name), ', ', first\_name) AS formatted\_name**

**-> FROM**

**-> employees;**

+-------------+----------------+

| employee\_id | formatted\_name |

+-------------+----------------+

| 101 | JOHNSON, Alice |

| 102 | SMITH, Bob |

| 103 | ADAMS, Carol |

| 104 | LEE, David |

| 105 | MARTINS, Eve |

| 106 | GREEN, Frank |

| 107 | BROWN, Grace |

| 108 | WILSON, Hank |

| 109 | CLARK, Ivy |

| 110 | WHITE, Jake |

+-------------+----------------+

10 rows in set (0.003 sec)

**15. SELECT**

**-> CONCAT(first\_name, ' ', last\_name,**

**-> IF(**

**-> employee\_id IN (**

**-> SELECT employee\_id**

**-> FROM employee\_projects ep**

**-> JOIN projects p ON ep.project\_id = p.project\_id**

**-> WHERE p.end\_date IS NULL OR p.end\_date > CURDATE()**

**-> ),**

**-> ' (Active)',**

**-> ''**

**-> )**

**-> ) AS name\_with\_status**

**-> FROM employees;**

+----------------------+

| name\_with\_status |

+----------------------+

| Alice Johnson |

| Bob Smith (Active) |

| Carol Adams |

| David Lee |

| Eve Martins (Active) |

| Frank Green |

| Grace Brown |

| Hank Wilson |

| Ivy Clark |

| Jake White |

+----------------------+

10 rows in set (0.009 sec)

**16.**

**MariaDB [employee\_management]> SELECT**

**-> employee\_id,**

**-> first\_name,**

**-> last\_name,**

**-> salary,**

**-> ROUND(salary) AS rounded\_salary**

**-> FROM**

**-> employees;**

+-------------+------------+-----------+---------+----------------+

| employee\_id | first\_name | last\_name | salary | rounded\_salary |

+-------------+------------+-----------+---------+----------------+

| 101 | Alice | Johnson | 4500.00 | 4500 |

| 102 | Bob | Smith | 5200.00 | 5200 |

| 103 | Carol | Adams | 6700.00 | 6700 |

| 104 | David | Lee | 3800.00 | 3800 |

| 105 | Eve | Martins | 4000.00 | 4000 |

| 106 | Frank | Green | 6000.00 | 6000 |

| 107 | Grace | Brown | 4900.00 | 4900 |

| 108 | Hank | Wilson | 3100.00 | 3100 |

| 109 | Ivy | Clark | 2700.00 | 2700 |

| 110 | Jake | White | 3600.00 | 3600 |

+-------------+------------+-----------+---------+----------------+

10 rows in set (0.001 sec)

**17. SELECT**

**-> employee\_id,**

**-> first\_name,**

**-> last\_name,**

**-> salary**

**-> FROM**

**-> employees**

**-> WHERE**

**-> MOD(ROUND(salary), 2) = 0;**

+-------------+------------+-----------+---------+

| employee\_id | first\_name | last\_name | salary |

+-------------+------------+-----------+---------+

| 101 | Alice | Johnson | 4500.00 |

| 102 | Bob | Smith | 5200.00 |

| 103 | Carol | Adams | 6700.00 |

| 104 | David | Lee | 3800.00 |

| 105 | Eve | Martins | 4000.00 |

| 106 | Frank | Green | 6000.00 |

| 107 | Grace | Brown | 4900.00 |

| 108 | Hank | Wilson | 3100.00 |

| 109 | Ivy | Clark | 2700.00 |

| 110 | Jake | White | 3600.00 |

+-------------+------------+-----------+---------+

10 rows in set (0.001 sec)

**18. SELECT**

**-> project\_id,**

**-> project\_name,**

**-> DATEDIFF(end\_date, start\_date) AS duration\_days**

**-> FROM**

**-> projects**

**-> WHERE**

**-> end\_date IS NOT NULL;**

+------------+-----------------------+---------------+

| project\_id | project\_name | duration\_days |

+------------+-----------------------+---------------+

| 201 | HR Revamp | 364 |

| 202 | Finance Automation | 350 |

| 204 | Marketing Blitz 2025 | 149 |

| 205 | Legal Compliance | 184 |

| 206 | Customer Portal | 364 |

| 207 | Sales Booster | 364 |

| 209 | Procurement Tracker | 245 |

| 210 | Operations Streamline | 365 |

+------------+-----------------------+---------------+

8 rows in set (0.003 sec)

**19. SELECT**

**-> ABS(**

**-> (SELECT salary FROM employees WHERE employee\_id = 101) -**

**-> (SELECT salary FROM employees WHERE employee\_id = 102)**

**-> ) AS salary\_diff;**

+-------------+

| salary\_diff |

+-------------+

| 700.00 |

+-------------+

1 row in set (0.004 sec)

20.

**MariaDB [employee\_management]> SELECT**

**-> employee\_id,**

**-> salary,**

**-> salary \* POWER(1.10, 1) AS increased\_salary**

**-> FROM**

**-> employees;**

+-------------+---------+--------------------+

| employee\_id | salary | increased\_salary |

+-------------+---------+--------------------+

| 101 | 4500.00 | 4950 |

| 102 | 5200.00 | 5720.000000000001 |

| 103 | 6700.00 | 7370.000000000001 |

| 104 | 3800.00 | 4180 |

| 105 | 4000.00 | 4400 |

| 106 | 6000.00 | 6600.000000000001 |

| 107 | 4900.00 | 5390 |

| 108 | 3100.00 | 3410.0000000000005 |

| 109 | 2700.00 | 2970.0000000000005 |

| 110 | 3600.00 | 3960.0000000000005 |

+-------------+---------+--------------------+

10 rows in set (0.003 sec)

21. SELECT

-> employee\_id,

-> FLOOR(RAND() \* 10000) AS random\_test\_id

-> FROM

-> employees;

+-------------+----------------+

| employee\_id | random\_test\_id |

+-------------+----------------+

| 101 | 4028 |

| 102 | 3300 |

| 103 | 4415 |

| 104 | 2179 |

| 105 | 7647 |

| 106 | 1701 |

| 107 | 5563 |

| 108 | 2715 |

| 109 | 6883 |

| 110 | 6273 |

+-------------+----------------+

10 rows in set (0.002 sec)

**22. SELECT**

**-> employee\_id,**

**-> salary,**

**-> CEIL(salary) AS salary\_ceil,**

**-> FLOOR(salary) AS salary\_floor**

**-> FROM**

**-> employees;**

+-------------+---------+-------------+--------------+

| employee\_id | salary | salary\_ceil | salary\_floor |

+-------------+---------+-------------+--------------+

| 101 | 4500.00 | 4500 | 4500 |

| 102 | 5200.00 | 5200 | 5200 |

| 103 | 6700.00 | 6700 | 6700 |

| 104 | 3800.00 | 3800 | 3800 |

| 105 | 4000.00 | 4000 | 4000 |

| 106 | 6000.00 | 6000 | 6000 |

| 107 | 4900.00 | 4900 | 4900 |

| 108 | 3100.00 | 3100 | 3100 |

| 109 | 2700.00 | 2700 | 2700 |

| 110 | 3600.00 | 3600 | 3600 |

+-------------+---------+-------------+--------------+

10 rows in set (0.000 sec)

23.

24. **SELECT**

**-> employee\_id,**

**-> salary,**

**-> CASE**

**-> WHEN salary > 6000 THEN 'High'**

**-> WHEN salary BETWEEN 4000 AND 6000 THEN 'Medium'**

**-> ELSE 'Low'**

**-> END AS salary\_category**

**-> FROM**

**-> employees;**

+-------------+---------+-----------------+

| employee\_id | salary | salary\_category |

+-------------+---------+-----------------+

| 101 | 4500.00 | Medium |

| 102 | 5200.00 | Medium |

| 103 | 6700.00 | High |

| 104 | 3800.00 | Low |

| 105 | 4000.00 | Medium |

| 106 | 6000.00 | Medium |

| 107 | 4900.00 | Medium |

| 108 | 3100.00 | Low |

| 109 | 2700.00 | Low |

| 110 | 3600.00 | Low |

+-------------+---------+-----------------+

10 rows in set (0.001 sec)

25**. SELECT**

**-> employee\_id,**

**-> salary,**

**-> LENGTH(REPLACE(CAST(salary AS CHAR), '.', '')) AS digit\_count**

**-> FROM**

**-> employees;**

+-------------+---------+-------------+

| employee\_id | salary | digit\_count |

+-------------+---------+-------------+

| 101 | 4500.00 | 6 |

| 102 | 5200.00 | 6 |

| 103 | 6700.00 | 6 |

| 104 | 3800.00 | 6 |

| 105 | 4000.00 | 6 |

| 106 | 6000.00 | 6 |

| 107 | 4900.00 | 6 |

| 108 | 3100.00 | 6 |

| 109 | 2700.00 | 6 |

| 110 | 3600.00 | 6 |

+-------------+---------+-------------+

10 rows in set (0.002 sec)

26. **SELECT CURRENT\_DATE() AS today\_date;**

+------------+

| today\_date |

+------------+

| 2025-07-27 |

+------------+

27. **SELECT**

**-> employee\_id,**

**-> first\_name,**

**-> last\_name,**

**-> hire\_date**

**-> FROM**

**-> employees**

**-> WHERE**

**-> YEAR(hire\_date) = YEAR(CURRENT\_DATE());**

Empty set (0.043 sec)

28. **SELECT**

**-> employee\_id,**

**-> first\_name,**

**-> last\_name,**

**-> hire\_date**

**-> FROM**

**-> employees**

**-> WHERE**

**-> YEAR(hire\_date) = YEAR(CURRENT\_DATE());**

**Empty set (0.001 sec)**

29. **SELECT NOW() AS current\_datetime;**

+---------------------+

| current\_datetime |

+---------------------+

| 2025-07-27 21:01:47 |

+---------------------+

1 row in set (0.000 sec)

30**. SELECT**

**-> employee\_id,**

**-> hire\_date,**

**-> YEAR(hire\_date) AS hire\_year,**

**-> MONTH(hire\_date) AS hire\_month,**

**-> DAY(hire\_date) AS hire\_day**

**-> FROM**

**-> employees;**

+-------------+------------+-----------+------------+----------+

| employee\_id | hire\_date | hire\_year | hire\_month | hire\_day |

+-------------+------------+-----------+------------+----------+

| 101 | 2015-03-15 | 2015 | 3 | 15 |

| 102 | 2018-06-23 | 2018 | 6 | 23 |

| 103 | 2012-09-10 | 2012 | 9 | 10 |

| 104 | 2020-01-05 | 2020 | 1 | 5 |

| 105 | 2019-12-11 | 2019 | 12 | 11 |

| 106 | 2017-07-08 | 2017 | 7 | 8 |

| 107 | 2014-11-02 | 2014 | 11 | 2 |

| 108 | 2013-02-17 | 2013 | 2 | 17 |

| 109 | 2021-08-30 | 2021 | 8 | 30 |

| 110 | 2022-05-19 | 2022 | 5 | 19 |

+-------------+------------+-----------+------------+----------+

10 rows in set (0.001 sec)

31. **SELECT**

**-> employee\_id,**

**-> first\_name,**

**-> last\_name,**

**-> hire\_date**

**-> FROM**

**-> employees**

**-> WHERE**

**-> hire\_date < '2020-01-01';**

+-------------+------------+-----------+------------+

| employee\_id | first\_name | last\_name | hire\_date |

+-------------+------------+-----------+------------+

| 101 | Alice | Johnson | 2015-03-15 |

| 102 | Bob | Smith | 2018-06-23 |

| 103 | Carol | Adams | 2012-09-10 |

| 105 | Eve | Martins | 2019-12-11 |

| 106 | Frank | Green | 2017-07-08 |

| 107 | Grace | Brown | 2014-11-02 |

| 108 | Hank | Wilson | 2013-02-17 |

+-------------+------------+-----------+------------+

7 rows in set (0.000 sec)

32.

**MariaDB [employee\_management]> SELECT**

**-> project\_id,**

**-> project\_name,**

**-> end\_date**

**-> FROM**

**-> projects**

**-> WHERE**

**-> end\_date IS NOT NULL**

**-> AND end\_date BETWEEN DATE\_SUB(CURRENT\_DATE(), INTERVAL 30 DAY) AND CURRENT\_DATE();**

+------------+----------------------+------------+

| project\_id | project\_name | end\_date |

+------------+----------------------+------------+

| 204 | Marketing Blitz 2025 | 2025-06-30 |

+------------+----------------------+------------+

33. **SELECT**

**-> project\_id,**

**-> project\_name,**

**-> DATEDIFF(end\_date, start\_date) AS total\_days**

**-> FROM**

**-> projects**

**-> WHERE**

**-> end\_date IS NOT NULL;**

+------------+-----------------------+------------+

| project\_id | project\_name | total\_days |

+------------+-----------------------+------------+

| 201 | HR Revamp | 364 |

| 202 | Finance Automation | 350 |

| 204 | Marketing Blitz 2025 | 149 |

| 205 | Legal Compliance | 184 |

| 206 | Customer Portal | 364 |

| 207 | Sales Booster | 364 |

| 209 | Procurement Tracker | 245 |

| 210 | Operations Streamline | 365 |

+------------+-----------------------+------------+

8 rows in set (0.000 sec)

34**. SELECT**

**-> CONCAT(**

**-> MONTHNAME('2025-07-23'), ' ',**

**-> DAY('2025-07-23'), ', ',**

**-> YEAR('2025-07-23')**

**-> ) AS formatted\_date;**

+----------------+

| formatted\_date |

+----------------+

| July 23, 2025 |

+----------------+

1 row in set (0.001 sec)

35**. SELECT**

**-> project\_id,**

**-> project\_name,**

**-> CASE**

**-> WHEN end\_date IS NULL THEN 'Ongoing'**

**-> ELSE 'Completed'**

**-> END AS project\_status**

**-> FROM**

**-> projects;**

+------------+---------------------------+----------------+

| project\_id | project\_name | project\_status |

+------------+---------------------------+----------------+

| 201 | HR Revamp | Completed |

| 202 | Finance Automation | Completed |

| 203 | IT Infrastructure Upgrade | Ongoing |

| 204 | Marketing Blitz 2025 | Completed |

| 205 | Legal Compliance | Completed |

| 206 | Customer Portal | Completed |

| 207 | Sales Booster | Completed |

| 208 | R&D Pilot | Ongoing |

| 209 | Procurement Tracker | Completed |

| 210 | Operations Streamline | Completed |

+------------+---------------------------+----------------+

10 rows in set (0.000 sec)

36. **SELECT**

**-> employee\_id,**

**-> salary,**

**-> CASE**

**-> WHEN salary >= 6000 THEN 'High'**

**-> WHEN salary BETWEEN 4000 AND 5999.99 THEN 'Medium'**

**-> ELSE 'Low'**

**-> END AS salary\_category**

**-> FROM employees;**

+-------------+---------+-----------------+

| employee\_id | salary | salary\_category |

+-------------+---------+-----------------+

| 101 | 4500.00 | Medium |

| 102 | 5200.00 | Medium |

| 103 | 6700.00 | High |

| 104 | 3800.00 | Low |

| 105 | 4000.00 | Medium |

| 106 | 6000.00 | High |

| 107 | 4900.00 | Medium |

| 108 | 3100.00 | Low |

| 109 | 2700.00 | Low |

| 110 | 3600.00 | Low |

+-------------+---------+-----------------+

10 rows in set (0.001 sec)

37. **SELECT**

**-> employee\_id,**

**-> COALESCE(email, 'No Email') AS email\_or\_default**

**-> FROM employees;**

+-------------+---------------------------+

| employee\_id | email\_or\_default |

+-------------+---------------------------+

| 101 | alice.johnson@company.com |

| 102 | bob.smith@company.com |

| 103 | carol.adams@company.com |

| 104 | david.lee@company.com |

| 105 | eve.martins@company.com |

| 106 | frank.green@company.com |

| 107 | grace.brown@company.com |

| 108 | hank.wilson@company.com |

| 109 | ivy.clark@company.com |

| 110 | jake.white@company.com |

+-------------+---------------------------+

10 rows in set (0.001 sec)

38**. SELECT**

**-> employee\_id,**

**-> hire\_date,**

**-> CASE**

**-> WHEN hire\_date < '2015-01-01' THEN 'Veteran'**

**-> ELSE 'Newcomer'**

**-> END AS veteran\_status**

**-> FROM employees;**

+-------------+------------+----------------+

| employee\_id | hire\_date | veteran\_status |

+-------------+------------+----------------+

| 101 | 2015-03-15 | Newcomer |

| 102 | 2018-06-23 | Newcomer |

| 103 | 2012-09-10 | Veteran |

| 104 | 2020-01-05 | Newcomer |

| 105 | 2019-12-11 | Newcomer |

| 106 | 2017-07-08 | Newcomer |

| 107 | 2014-11-02 | Veteran |

| 108 | 2013-02-17 | Veteran |

| 109 | 2021-08-30 | Newcomer |

| 110 | 2022-05-19 | Newcomer |

+-------------+------------+----------------+

10 rows in set (0.000 sec)

**39. SELECT**

**-> employee\_id,**

**-> COALESCE(salary, 3000) AS salary\_with\_default**

**-> FROM employees;**

+-------------+---------------------+

| employee\_id | salary\_with\_default |

+-------------+---------------------+

| 101 | 4500.00 |

| 102 | 5200.00 |

| 103 | 6700.00 |

| 104 | 3800.00 |

| 105 | 4000.00 |

| 106 | 6000.00 |

| 107 | 4900.00 |

| 108 | 3100.00 |

| 109 | 2700.00 |

| 110 | 3600.00 |

+-------------+---------------------+

10 rows in set (0.000 sec)

40. **SELECT**

**-> e.employee\_id,**

**-> d.department\_name,**

**-> CASE**

**-> WHEN d.department\_name = 'Information Technology' THEN 'IT'**

**-> WHEN d.department\_name = 'Human Resources' THEN 'HR'**

**-> ELSE 'Other'**

**-> END AS dept\_group**

**-> FROM employees e**

**-> JOIN department d USING(department\_id);**

+-------------+--------------------------+------------+

| employee\_id | department\_name | dept\_group |

+-------------+--------------------------+------------+

| 101 | Human Resources | HR |

| 102 | Information Technology | IT |

| 103 | Finance | Other |

| 104 | Marketing | Other |

| 105 | Information Technology | IT |

| 106 | Sales | Other |

| 107 | Legal | Other |

| 108 | Operations | Other |

| 109 | Research and Development | Other |

| 110 | Customer Service | Other |

+-------------+--------------------------+------------+

10 rows in set (0.001 sec)

**41. SELECT**

**-> e.employee\_id,**

**-> CASE**

**-> WHEN ep.project\_id IS NULL THEN 'Unassigned'**

**-> ELSE 'Assigned'**

**-> END AS assignment\_status**

**-> FROM employees e**

**-> LEFT JOIN employee\_projects ep ON e.employee\_id = ep.employee\_id;**

+-------------+-------------------+

| employee\_id | assignment\_status |

+-------------+-------------------+

| 101 | Assigned |

| 102 | Assigned |

| 103 | Assigned |

| 104 | Assigned |

| 105 | Assigned |

| 106 | Assigned |

| 107 | Unassigned |

| 108 | Unassigned |

| 109 | Unassigned |

| 110 | Unassigned |

+-------------+-------------------+

10 rows in set (0.000 sec)

**42. SELECT**

**-> employee\_id,**

**-> COALESCE(salary, 0) AS salary,**

**-> CASE**

**-> WHEN COALESCE(salary, 0) > 6000 THEN 'H1'**

**-> WHEN salary BETWEEN 4000 AND 6000 THEN 'H2'**

**-> ELSE 'H3'**

**-> END AS tax\_band**

**-> FROM employees;**

+-------------+---------+----------+

| employee\_id | salary | tax\_band |

+-------------+---------+----------+

| 101 | 4500.00 | H2 |

| 102 | 5200.00 | H2 |

| 103 | 6700.00 | H1 |

| 104 | 3800.00 | H3 |

| 105 | 4000.00 | H2 |

| 106 | 6000.00 | H2 |

| 107 | 4900.00 | H2 |

| 108 | 3100.00 | H3 |

| 109 | 2700.00 | H3 |

| 110 | 3600.00 | H3 |

+-------------+---------+----------+

10 rows in set (0.000 sec)

**43. SELECT**

**-> project\_id,**

**-> project\_name,**

**-> CASE**

**-> WHEN end\_date IS NULL THEN 'Ongoing'**

**-> WHEN DATEDIFF(end\_date, start\_date) < 30 THEN 'Short-term'**

**-> WHEN DATEDIFF(end\_date, start\_date) <= 180 THEN 'Medium-term'**

**-> ELSE 'Long-term'**

**-> END AS duration\_label**

**-> FROM projects;**

+------------+---------------------------+----------------+

| project\_id | project\_name | duration\_label |

+------------+---------------------------+----------------+

| 201 | HR Revamp | Long-term |

| 202 | Finance Automation | Long-term |

| 203 | IT Infrastructure Upgrade | Ongoing |

| 204 | Marketing Blitz 2025 | Medium-term |

| 205 | Legal Compliance | Long-term |

| 206 | Customer Portal | Long-term |

| 207 | Sales Booster | Long-term |

| 208 | R&D Pilot | Ongoing |

| 209 | Procurement Tracker | Long-term |

| 210 | Operations Streamline | Long-term |

+------------+---------------------------+----------------+

10 rows in set (0.000 sec)

**44. SELECT**

**-> employee\_id,**

**-> salary,**

**-> CASE**

**-> WHEN MOD(ROUND(COALESCE(salary,0)), 2) = 0 THEN 'Even Salary'**

**-> ELSE 'Odd Salary'**

**-> END AS salary\_parity**

**-> FROM employees;**

+-------------+---------+---------------+

| employee\_id | salary | salary\_parity |

+-------------+---------+---------------+

| 101 | 4500.00 | Even Salary |

| 102 | 5200.00 | Even Salary |

| 103 | 6700.00 | Even Salary |

| 104 | 3800.00 | Even Salary |

| 105 | 4000.00 | Even Salary |

| 106 | 6000.00 | Even Salary |

| 107 | 4900.00 | Even Salary |

| 108 | 3100.00 | Even Salary |

| 109 | 2700.00 | Even Salary |

| 110 | 3600.00 | Even Salary |

+-------------+---------+---------------+

10 rows in set (0.000 sec)

**45. SELECT**

**-> CONCAT(**

**-> COALESCE(first\_name, 'First'),**

**-> ' ',**

**-> COALESCE(last\_name, 'Last')**

**-> ) AS display\_name**

**-> FROM employees;**

+---------------+

| display\_name |

+---------------+

| Alice Johnson |

| Bob Smith |

| Carol Adams |

| David Lee |

| Eve Martins |

| Frank Green |

| Grace Brown |

| Hank Wilson |

| Ivy Clark |

| Jake White |

+---------------+

10 rows in set (0.000 sec)

**46. SELECT**

**-> employee\_id,**

**-> CONCAT(first\_name, last\_name) AS name\_joined,**

**-> CASE**

**-> WHEN LENGTH(CONCAT(first\_name, last\_name)) > 10 THEN 'Long Name'**

**-> ELSE 'Short Name'**

**-> END AS name\_length\_label**

**-> FROM employees;**

+-------------+--------------+-------------------+

| employee\_id | name\_joined | name\_length\_label |

+-------------+--------------+-------------------+

| 101 | AliceJohnson | Long Name |

| 102 | BobSmith | Short Name |

| 103 | CarolAdams | Short Name |

| 104 | DavidLee | Short Name |

| 105 | EveMartins | Short Name |

| 106 | FrankGreen | Short Name |

| 107 | GraceBrown | Short Name |

| 108 | HankWilson | Short Name |

| 109 | IvyClark | Short Name |

| 110 | JakeWhite | Short Name |

+-------------+--------------+-------------------+

10 rows in set (0.001 sec)

**47. SELECT**

**-> employee\_id,**

**-> email,**

**-> CASE**

**-> WHEN UPPER(email) LIKE '%TEST%' THEN 'Dummy Account'**

**-> ELSE 'Real Account'**

**-> END AS email\_type**

**-> FROM employees;**

+-------------+---------------------------+--------------+

| employee\_id | email | email\_type |

+-------------+---------------------------+--------------+

| 101 | alice.johnson@company.com | Real Account |

| 102 | bob.smith@company.com | Real Account |

| 103 | carol.adams@company.com | Real Account |

| 104 | david.lee@company.com | Real Account |

| 105 | eve.martins@company.com | Real Account |

| 106 | frank.green@company.com | Real Account |

| 107 | grace.brown@company.com | Real Account |

| 108 | hank.wilson@company.com | Real Account |

| 109 | ivy.clark@company.com | Real Account |

| 110 | jake.white@company.com | Real Account |

+-------------+---------------------------+--------------+

10 rows in set (0.000 sec)

**48. SELECT**

**-> employee\_id,**

**-> hire\_date,**

**-> CASE**

**-> WHEN YEAR(hire\_date) <= YEAR(CURRENT\_DATE()) - 10 THEN 'Senior'**

**-> ELSE 'Junior'**

**-> END AS seniority**

**-> FROM employees;**

+-------------+------------+-----------+

| employee\_id | hire\_date | seniority |

+-------------+------------+-----------+

| 101 | 2015-03-15 | Senior |

| 102 | 2018-06-23 | Junior |

| 103 | 2012-09-10 | Senior |

| 104 | 2020-01-05 | Junior |

| 105 | 2019-12-11 | Junior |

| 106 | 2017-07-08 | Junior |

| 107 | 2014-11-02 | Senior |

| 108 | 2013-02-17 | Senior |

| 109 | 2021-08-30 | Junior |

| 110 | 2022-05-19 | Junior |

+-------------+------------+-----------+

10 rows in set (0.001 sec)

**49. SELECT**

**-> employee\_id,**

**-> salary,**

**-> CASE**

**-> WHEN salary IS NULL THEN 'N/A'**

**-> WHEN salary <= 4000 THEN '5%'**

**-> WHEN salary <= 6000 THEN '7%'**

**-> ELSE '10%'**

**-> END AS increment\_rate**

**-> FROM employees;**

+-------------+---------+----------------+

| employee\_id | salary | increment\_rate |

+-------------+---------+----------------+

| 101 | 4500.00 | 7% |

| 102 | 5200.00 | 7% |

| 103 | 6700.00 | 10% |

| 104 | 3800.00 | 5% |

| 105 | 4000.00 | 5% |

| 106 | 6000.00 | 7% |

| 107 | 4900.00 | 7% |

| 108 | 3100.00 | 5% |

| 109 | 2700.00 | 5% |

| 110 | 3600.00 | 5% |

+-------------+---------+----------------+

10 rows in set (0.001 sec)

**50. SELECT**

**-> employee\_id,**

**-> hire\_date,**

**-> CASE**

**-> WHEN MONTH(hire\_date) = MONTH(CURRENT\_DATE()) THEN 'Anniversary Month'**

**-> ELSE 'Regular Month'**

**-> END AS anniversary\_flag**

**-> FROM employees;**

+-------------+------------+-------------------+

| employee\_id | hire\_date | anniversary\_flag |

+-------------+------------+-------------------+

| 101 | 2015-03-15 | Regular Month |

| 102 | 2018-06-23 | Regular Month |

| 103 | 2012-09-10 | Regular Month |

| 104 | 2020-01-05 | Regular Month |

| 105 | 2019-12-11 | Regular Month |

| 106 | 2017-07-08 | Anniversary Month |

| 107 | 2014-11-02 | Regular Month |

| 108 | 2013-02-17 | Regular Month |

| 109 | 2021-08-30 | Regular Month |

| 110 | 2022-05-19 | Regular Month |

+-------------+------------+-------------------+

10 rows in set (0.000 sec)