

```
MySQL 8.0 Command Line Cli  x  +  v

mysql> SELECT salary * 0.12 AS incentive
-> FROM employees
-> WHERE employee_id = 110;
Empty set (0.01 sec)

mysql> CALL calculate_incentive(110);
ERROR 1305 (42000): PROCEDURE my_employee.calculate_incentive does not exist
mysql> SET @myVariable := 100;
Query OK, 0 rows affected (0.00 sec)

mysql> SET @myvariable2 := 200;
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> SELECT
->     @myVariable AS case_sensitive_variable,
->     @myvariable2 AS lowercase_variable;
+-----+-----+
| case_sensitive_variable | lowercase_variable |
+-----+-----+
| 100                     | 200                |
+-----+-----+
1 row in set (0.00 sec)

mysql> UPDATE employees
-> SET salary = salary * 1.10
-> WHERE employee_id = 122;
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql>
mysql> SELECT 'Salary adjusted for employee with ID 122.' AS message;
+-----+
| message |
+-----+
| Salary adjusted for employee with ID 122. |
+-----+
1 row in set (0.00 sec)

mysql> DELIMITER //
mysql>
```

```
MySQL 8.0 Command Line Cl... + v
+-----+
| my_var = TRUE |
+-----+
1 row in set (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> CALL pri_bool('my_var2', FALSE);
+-----+
| result |
+-----+
| my_var2 = FALSE |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

mysql> SET @test_string := 'Blweate';
Query OK, 0 rows affected (0.00 sec)

mysql> SET @pattern1 := 'B%a_e';
Query OK, 0 rows affected (0.00 sec)

mysql> SET @pattern2 := 'B%A_E';
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT
-> CASE WHEN @test_string LIKE @pattern1 THEN 'TRUE' ELSE 'FALSE' END AS result1,
-> CASE WHEN @test_string LIKE @pattern2 THEN 'TRUE' ELSE 'FALSE' END AS result2;
+-----+
| result1 | result2 |
+-----+
| TRUE | TRUE |
+-----+
1 row in set (0.00 sec)

mysql> SET @num_small := 8;
Query OK, 0 rows affected (0.00 sec)

mysql> SET @num_large := 5;

MySQL 8.0 Command Line Cl... + v
+-----+
| num_small | num_large |
+-----+
| 5 | NULL |
+-----+
1 row in set (0.00 sec)

mysql> DELIMITER //
mysql> CREATE PROCEDURE calculate_incentive(IN sal_achieve DECIMAL(10,2), IN target_qty DECIMAL(10,2), IN emp_id INT)
-> BEGIN
-> DECLARE incentive DECIMAL(10,2) DEFAULT 0;
-> DECLARE updated VARCHAR(3) DEFAULT 'No';
-> IF sal_achieve > (target_qty + 200) THEN
-> SET incentive := (sal_achieve - target_qty) / 4;
-> UPDATE employees SET salary = salary + incentive WHERE employee_id = emp_id;
-> SET updated := 'Yes';
-> END IF;
-> SELECT CONCAT('Table updated? ', updated, ', incentive = ', incentive) AS result;
-> END //
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
mysql> CALL calculate_incentive(2300, 2000, 101);
+-----+
| result |
+-----+
| Table updated? Yes, incentive = 75.00 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> CALL calculate_incentive(3600, 3000, 102);
+-----+
| result |
+-----+
```

```
mysql> CALL calculate_incentive(3600, 3000, 102);
+-----+
| result |
+-----+
| Table updated? Yes, incentive = 150.00 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> SET @department_id := 50;
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> SELECT COUNT(*) AS employee_count
-> FROM employees
-> WHERE department_id = @department_id;
+-----+
| employee_count |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT
-> CASE WHEN COUNT(*) >= 45 THEN 'There are no vacancies in the department 50.'
-> ELSE CONCAT('There are ', 45 - COUNT(*), ' vacancies in department 50.')
-> END AS vacancy_status
-> FROM employees
-> WHERE department_id = @department_id;
+-----+
| vacancy_status |
+-----+
| There are 45 vacancies in department 50. |
+-----+
1 row in set (0.00 sec)

mysql> SELECT employee_id, CONCAT(first_name, ' ', last_name) AS full_name, job_id, hire_date, salary
-> FROM employees;
+-----+
| employee_id | full_name | job_id | hire_date | salary |
+-----+
| 101 | Alice Johnson | SA_REP | 2020-01-15 | 60075.00 |
| 102 | Bob Smith | IT_PROG | 2019-02-20 | 70150.00 |
| 103 | Charlie Brown | HR_REP | 2018-03-25 | 50000.00 |
| 104 | David Davis | AD_VP | 2021-04-10 | 90000.00 |
| 105 | Eva Green | SA_MAN | 2017-05-30 | 80000.00 |
+-----+
5 rows in set (0.00 sec)

mysql> SELECT
-> e.employee_id,
-> CONCAT(e.first_name, ' ', e.last_name) AS employee_name,
-> CONCAT(m.first_name, ' ', m.last_name) AS manager_name
-> FROM employees e
-> LEFT JOIN employees m ON e.manager_id = m.employee_id;
+-----+
| employee_id | employee_name | manager_name |
+-----+
| 101 | Alice Johnson | NULL |
| 102 | Bob Smith | Alice Johnson |
| 103 | Charlie Brown | Alice Johnson |
| 104 | David Davis | NULL |
| 105 | Eva Green | David Davis |
+-----+
5 rows in set (0.00 sec)

mysql> SELECT job_id, job_title, min_salary
-> FROM jobs;
ERROR 1146 (42S02): Table 'my_employee.jobs' doesn't exist
mysql> SELECT
```

```
MySQL 8.0 Command Line Cli  x  +  v
+-----+-----+-----+
| 101 | Alice Johnson | NULL |
| 102 | Bob Smith | Alice Johnson |
| 103 | Charlie Brown | Alice Johnson |
| 104 | David Davis | NULL |
| 105 | Eva Green | David Davis |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SELECT job_id, job_title, min_salary
-> FROM jobs;
ERROR 1146 (42S02): Table 'my_employee.jobs' doesn't exist
mysql> SELECT
-> e.employee_id,
-> CONCAT(e.first_name, ' ', e.last_name) AS employee_name,
-> jh.start_date
-> FROM employees e
-> JOIN job_history jh ON e.employee_id = jh.employee_id;
+-----+-----+-----+
| employee_id | employee_name | start_date |
+-----+-----+-----+
| 101 | Alice Johnson | 2015-01-01 |
| 102 | Bob Smith | 2018-01-01 |
| 103 | Charlie Brown | 2017-01-01 |
| 104 | David Davis | 2016-01-01 |
| 105 | Eva Green | 2014-01-01 |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> SET @num_small := 8;
```