```
!apt-get -y install mysql-server
         reading /usr/share/mecab/dic/ipadic/Postp.csv ... 146
reading /usr/share/mecab/dic/ipadic/Verb.csv ... 130750
reading /usr/share/mecab/dic/ipadic/Adverb.csv ... 3032
           reading /usr/share/mecab/dic/ipadic/Noun.demonst.csv ... 120
reading /usr/share/mecab/dic/ipadic/Noun.demonst.csv ... 120
reading /usr/share/mecab/dic/ipadic/Symbol.csv ... 208
reading /usr/share/mecab/dic/ipadic/Others.csv ... 2
reading /usr/share/mecab/dic/ipadic/Noun.verbal.csv ... 12146
reading /usr/share/mecab/dic/ipadic/Adnominal.csv ... 135
           reading /usr/share/mecab/dic/ipadic/Aunominal.csv ... 135
reading /usr/share/mecab/dic/ipadic/Aunominal.csv ... 72999
reading /usr/share/mecab/dic/ipadic/Auxil.csv ... 199
reading /usr/share/mecab/dic/ipadic/Noun.adverbal.csv ... 795
reading /usr/share/mecab/dic/ipadic/Noun.others.csv ... 151
reading /usr/share/mecab/dic/ipadic/Noun.name.csv ... 34202
           reading /usr/share/mecab/dic/ipadic/Interjection.csv ... 252 reading /usr/share/mecab/dic/ipadic/Suffix.csv ... 1393
           done!
update-alternatives: using /var/lib/mecab/dic/ipadic-utf8 to provide /var/lib/mecab/dic/debian (mecab-dictionary) in auto mode
          update-alternatives: using /var/lib/mecab/dic/ipadic-utf8 to provide /setting up libhtml-parser-perl:amd64 (3.76-lbuild2) ...
Setting up mysql-server (8.0.42-0ubuntu0.22.04.2) ...
Setting up libtgi-pm-perl (4.54-1) ...
Setting up libtml-template-perl (2.97-1.1) ...
Setting up libcgi-fast-perl (1:2.15-1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
/sbin/ldconfig.real: /usr/local/lib/libtcm.so.1 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libur adapter_level_zero_v2.so.0 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtbbmalloc.so.2 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtcm_debug.so.1 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtbbbind_2_0.so.3 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtbbbind_2_5.so.3 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libur_loader.so.0 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libur_adapter_opencl.so.0 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtbbmalloc_proxy.so.2 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libur_adapter_level_zero.so.0 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtbb.so.12 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libhwloc.so.15 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libumf.so.0 is not a symbolic link
           /sbin/ldconfig.real: /usr/local/lib/libtbbbind.so.3 is not a symbolic link
[2] !pip install mysql-connector-python
    Collecting mysql-connector-python

Downloading mysql_connector_python-9.3.0-cp311-cp311-manylinux_2_28_x86_64.whl.metadata (7.2 kB)

Downloading mysql_connector_python-9.3.0-cp311-cp311-manylinux_2_28_x86_64.whl (33.9 MB)
                                                                                    33.9 MB 32.5 MB/s eta 0:00:00
           Installing collected packages: mysql-connector-python Successfully installed mysql-connector-python-9.3.0
    [3] !service mysql start
              * Starting MySQL database server mysqld
             su: warning: cannot change directory to /nonexistent: No such file or directory
                  ...done.
   [4] !mysql -e "ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY 'root'; FLUSH PRIVILEGES;"
   [5] !mysql -u root -proot -e "SHOW DATABASES;"
     mysql: [Warning] Using a password on the command line interface can be insecure.
              | Database
                information_schema
                performance_schema
               sys
```

```
[6] sql_script = """
        CREATE DATABASE IF NOT EXISTS empresa;
        USE empresa;
        CREATE TABLE IF NOT EXISTS funcionarios (
            id INT AUTO_INCREMENT PRIMARY KEY,
            nome VARCHAR(100),
            salario DECIMAL(10,2)
        DELIMITER //
        CREATE FUNCTION calcular_bonus (sal DECIMAL(10,2))
        RETURNS DECIMAL(10,2)
           RETURN sal * 0.10;
        DELIMITER //
        CREATE PROCEDURE adicionar_funcionario (
            IN p_nome VARCHAR(100),
            IN p_salario DECIMAL(10,2)
        BEGIN
            INSERT INTO funcionarios (nome, salario) VALUES (p_nome, p_salario);
        END//
        with open("setup.sql", "w") as f:
            f.write(sql_script)
  [7] !mysql -u root -proot < setup.sql

→ mysql: [Warning] Using a password on the command line interface can be insecure.

[8] import mysql.connector
        conn = mysql.connector.connect(
           host="localhost",
            user="root",
            password="root",
            database="empresa"
        cursor = conn.cursor()
  [9] cursor.callproc('adicionar_funcionario', ['Ana Souza', 3500.00])
        conn.commit()
[10] cursor.execute("""
         SELECT nome, salario, calcular_bonus(salario) AS bonus
      for row in cursor.fetchall():
        print(row)
  → ('Ana Souza', Decimal('3500.00'), Decimal('350.00'))
 [11] cursor.close()
      conn.close()
```