FinalTerm Example Group 1 21-Dec-2023 8:30h

Name and ID :

MySQL : user root password DDB.123

Download backup file from Moodle. Extract zip file.

Restore DB from this file mysqlsampledatabase.sql

1. Insert 3 records for customers and employees

INSERT INTO employees (employeeNumber, lastName, firstName, extension, email, officeCode, reportsTo, jobTitle)

VALUES ('1287', 'Johnson', 'Michael', 'x4321', 'mjohnson@classicmodelcars.com', '1', '1056', 'Sales Representative');

INSERT INTO customers (customerNumber, customerName, contactLastName, contactFirstName, phone, addressLine1, addressLine2, city, state, postalCode, country, salesRepEmployeeNumber, creditLimit)

VALUES ('497', 'New Global Gifts Inc', 'Johnson', 'Michael', '5551234567', '789 Broadway', 'Suite 303', 'Los Angeles', 'CA', '90001', 'USA', '1287', '7500.00');

INSERT INTO employees (employeeNumber, lastName, firstName, extension, email, officeCode, reportsTo, jobTitle)

VALUES ('1288', 'Smith', 'Jennifer', 'x5432', 'jsmith@classicmodelcars.com', '1', '1056', 'Sales Representative');

INSERT INTO customers (customerNumber, customerName, contactLastName, contactFirstName, phone, addressLine1, addressLine2, city, state, postalCode, country, salesRepEmployeeNumber, creditLimit)

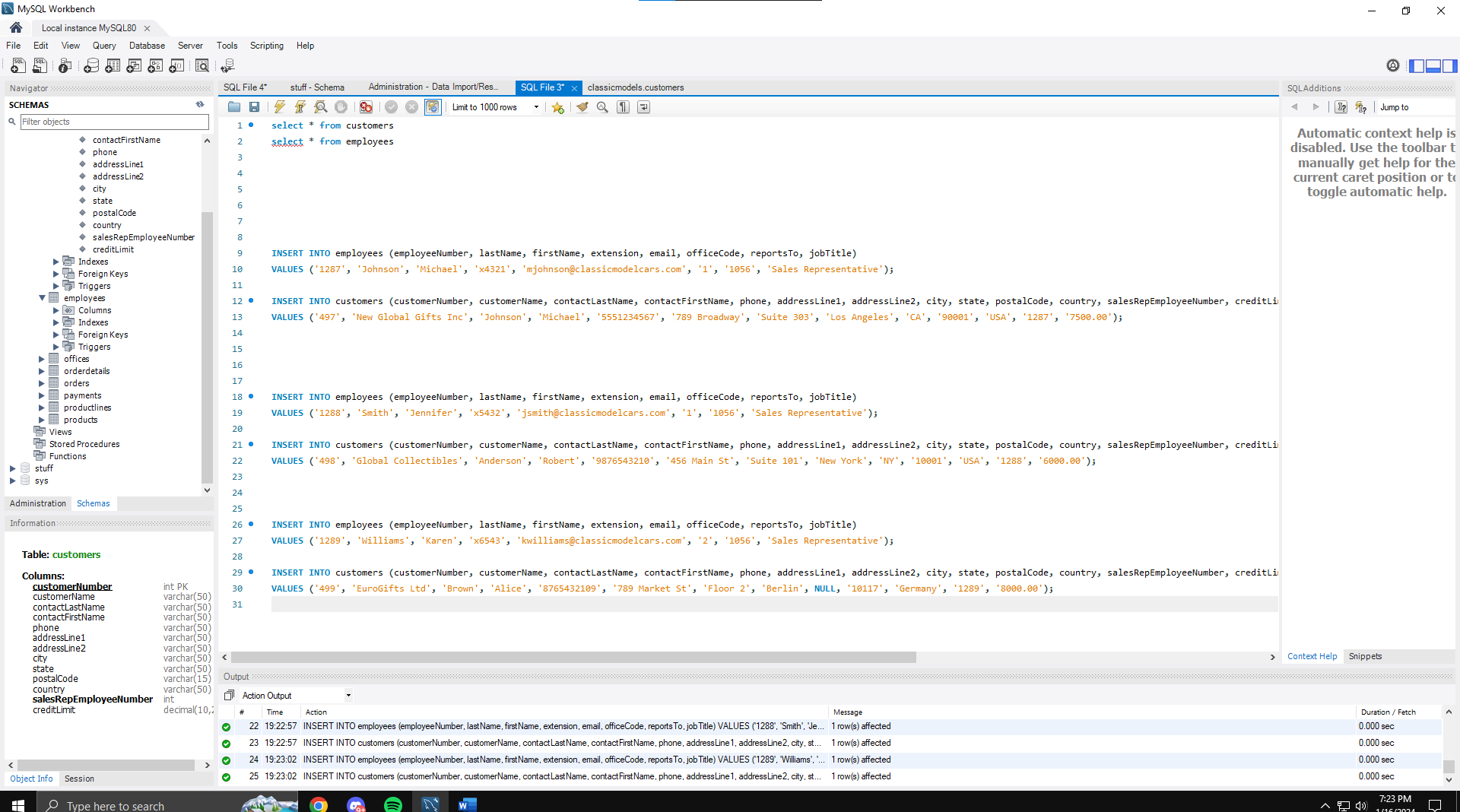
VALUES ('498', 'Global Collectibles', 'Anderson', 'Robert', '9876543210', '456 Main St', 'Suite 101', 'New York', 'NY', '10001', 'USA', '1288', '6000.00');

INSERT INTO employees (employeeNumber, lastName, firstName, extension, email, officeCode, reportsTo, jobTitle)

VALUES ('1289', 'Williams', 'Karen', 'x6543', 'kwilliams@classicmodelcars.com', '2', '1056', 'Sales Representative');

INSERT INTO customers (customerNumber, customerName, contactLastName, contactFirstName, phone, addressLine1, addressLine2, city, state, postalCode, country, salesRepEmployeeNumber, creditLimit)

VALUES ('499', 'EuroGifts Ltd', 'Brown', 'Alice', '8765432109', '789 Market St', 'Floor 2', 'Berlin', NULL, '10117', 'Germany', '1289', '8000.00');

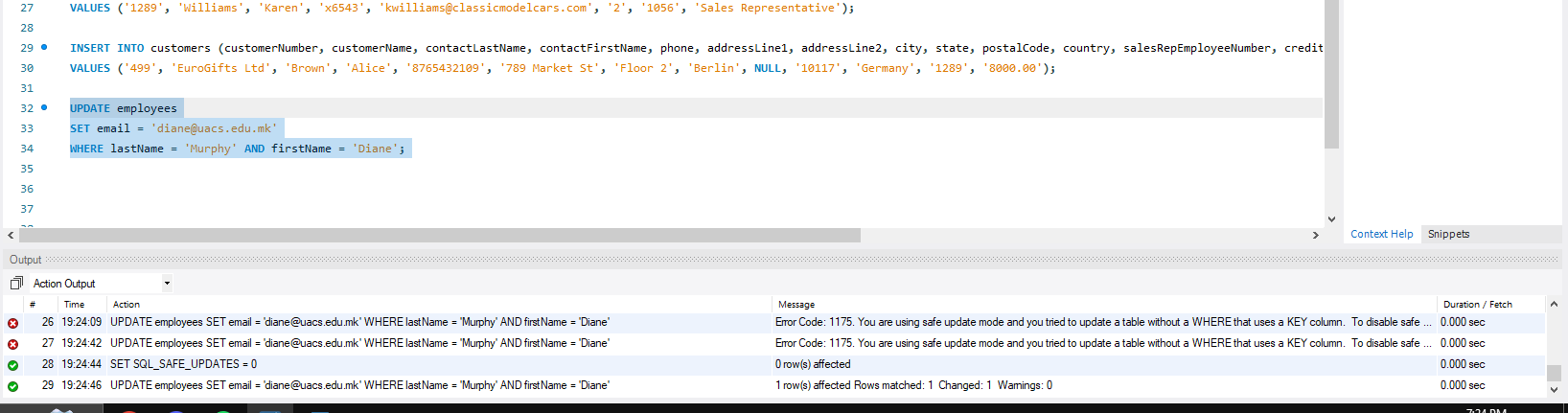


1. Update e-mail for Employee Diane Murphy to be [diane@uacs.edu.mk](mailto:diane@uacs.edu.mk)

UPDATE employees

SET email = 'diane@uacs.edu.mk'

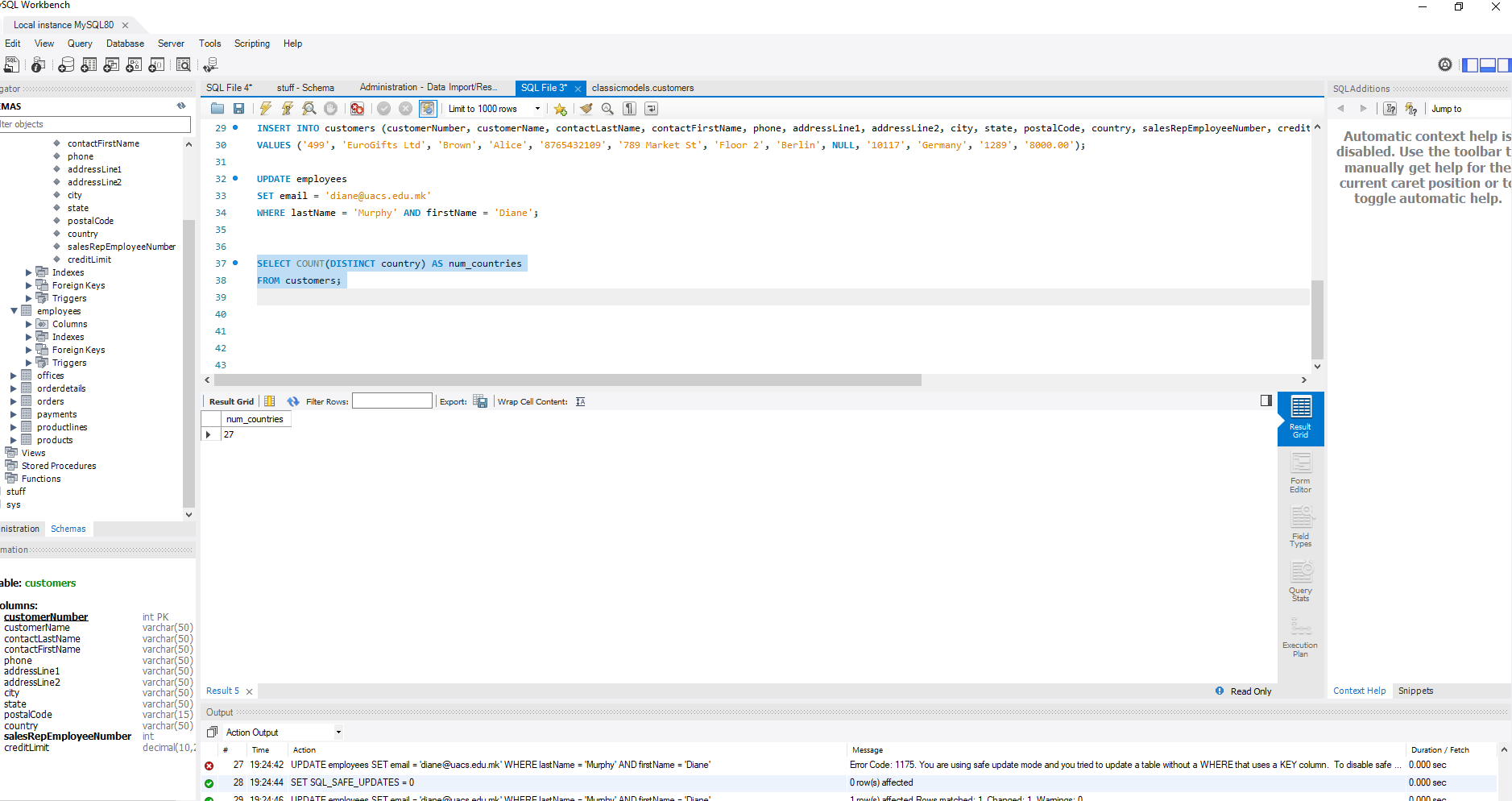
WHERE lastName = 'Murphy' AND firstName = 'Diane';



1. How many different countries we have in our DB (table customers)? Write sql statement

SELECT COUNT(DISTINCT country) AS num\_countries

FROM customers;



1. Create stored procedure to find all customers from USA and the country who is input parametar for the procedures

DELIMITER //

CREATE PROCEDURE GetCustomersByCountry(IN target\_country VARCHAR(255))

BEGIN

SELECT \*

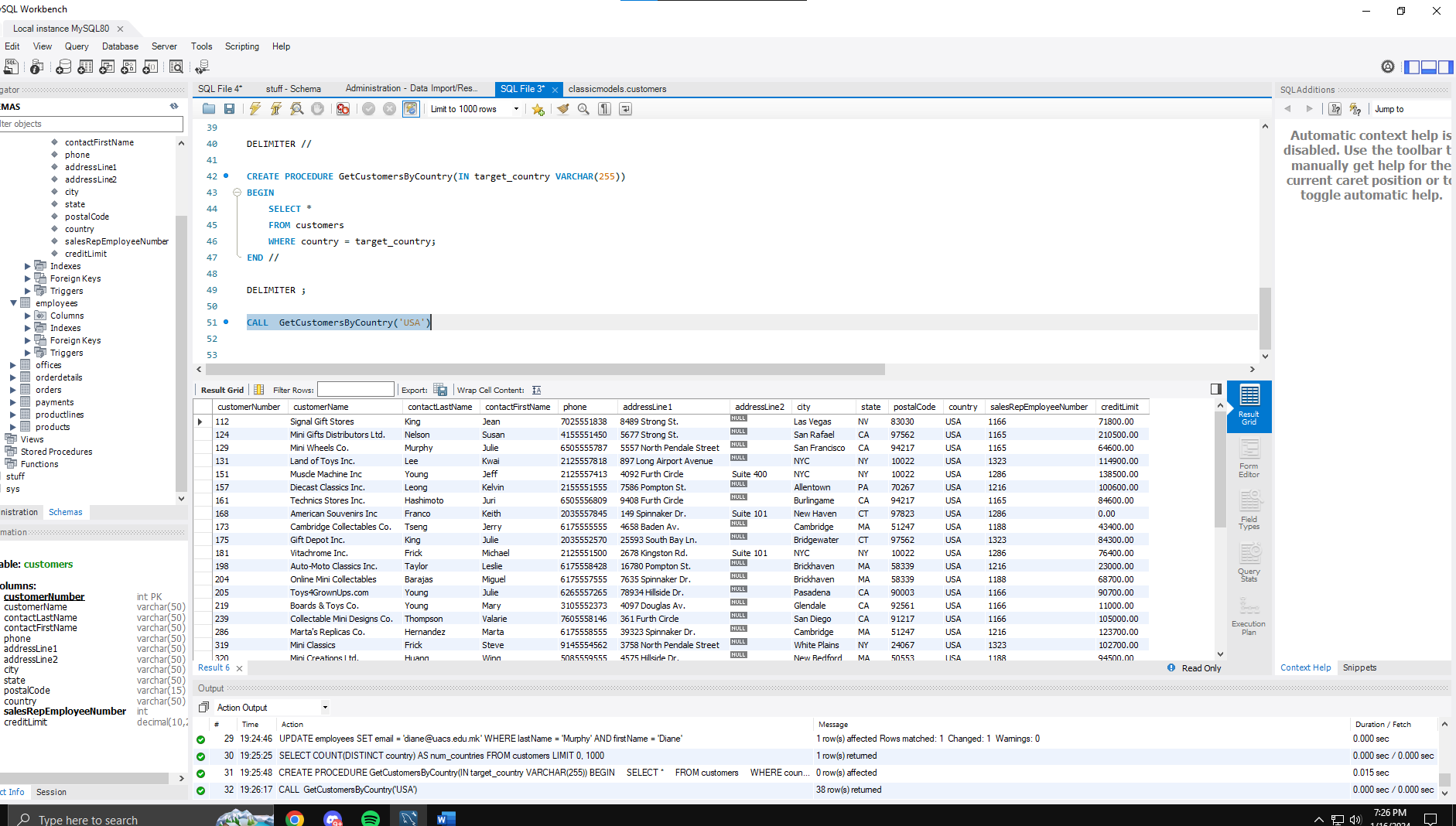
FROM customers

WHERE country = target\_country;

END //

DELIMITER ;

CALL GetCustomersByCountry('USA')



1. Create View to see all customers from Torino

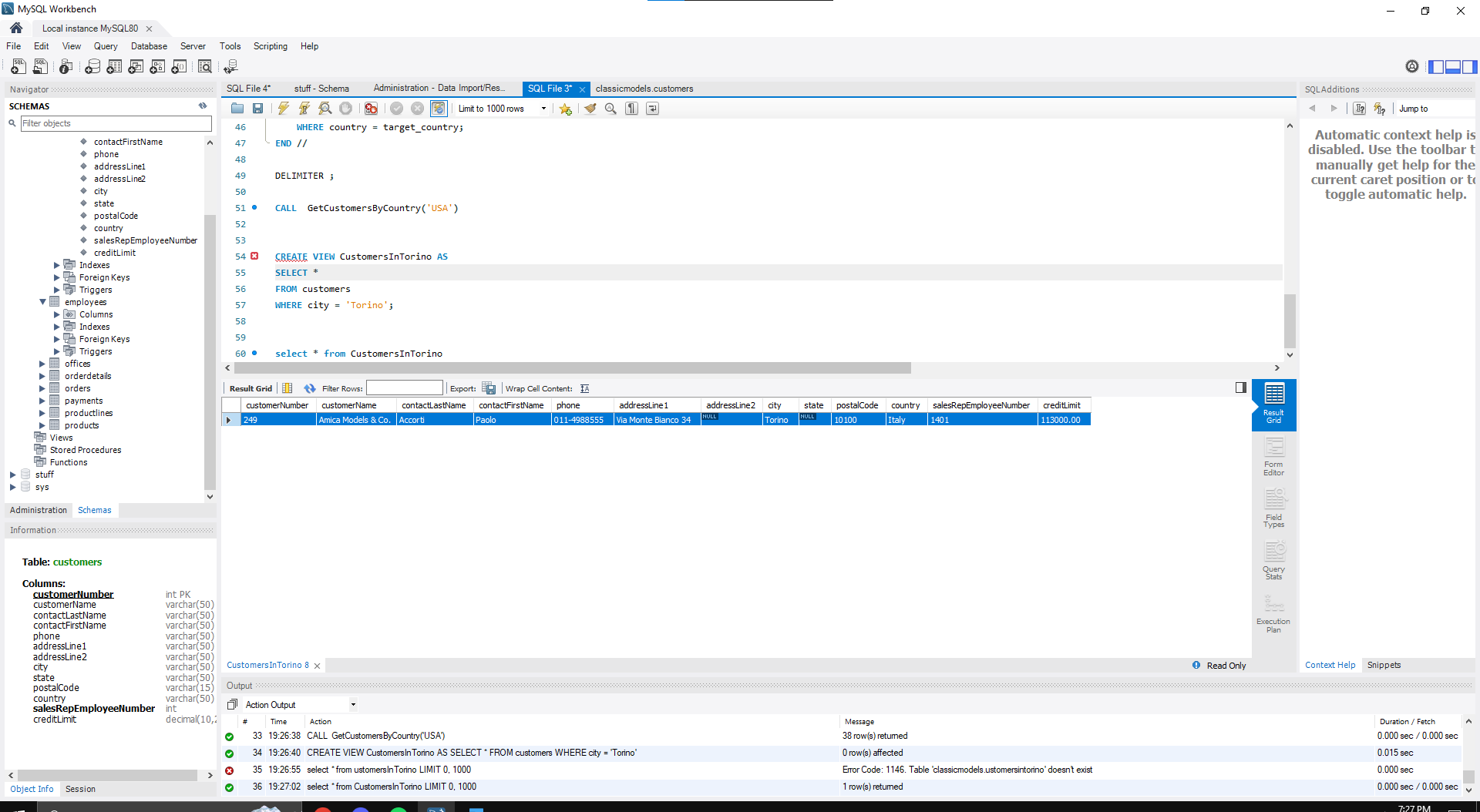
CREATE VIEW CustomersInTorino AS

SELECT \*

FROM customers

WHERE city = 'Torino';

select \* from CustomersInTorino



1. Create procedure that list all customers from some city (city is input parameter in the procedure)

DELIMITER //

CREATE PROCEDURE GetCustomersByCity(IN target\_city VARCHAR(255))

BEGIN

SELECT \*

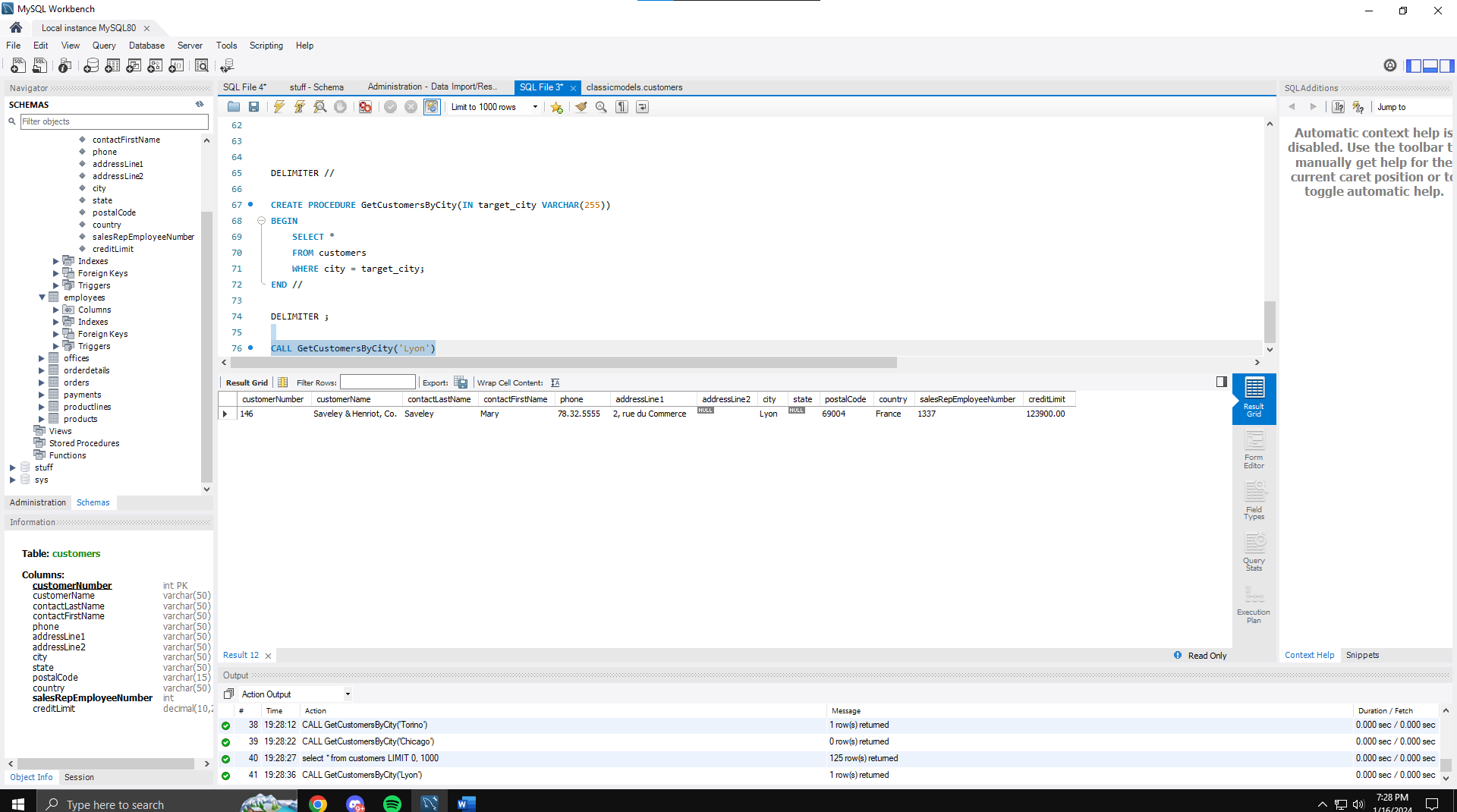
FROM customers

WHERE city = target\_city;

END //

DELIMITER ;

CALL GetCustomersByCity('Lyon')



1. Create procedure that return customers (with Names) that have amount payment bigger than 6000

DELIMITER //

CREATE PROCEDURE GetCustomersByPaymentAmount(IN payment\_amount DECIMAL(10, 2))

BEGIN

SELECT customerName

FROM customers

WHERE customerNumber IN (

SELECT customerNumber

FROM payments

GROUP BY customerNumber

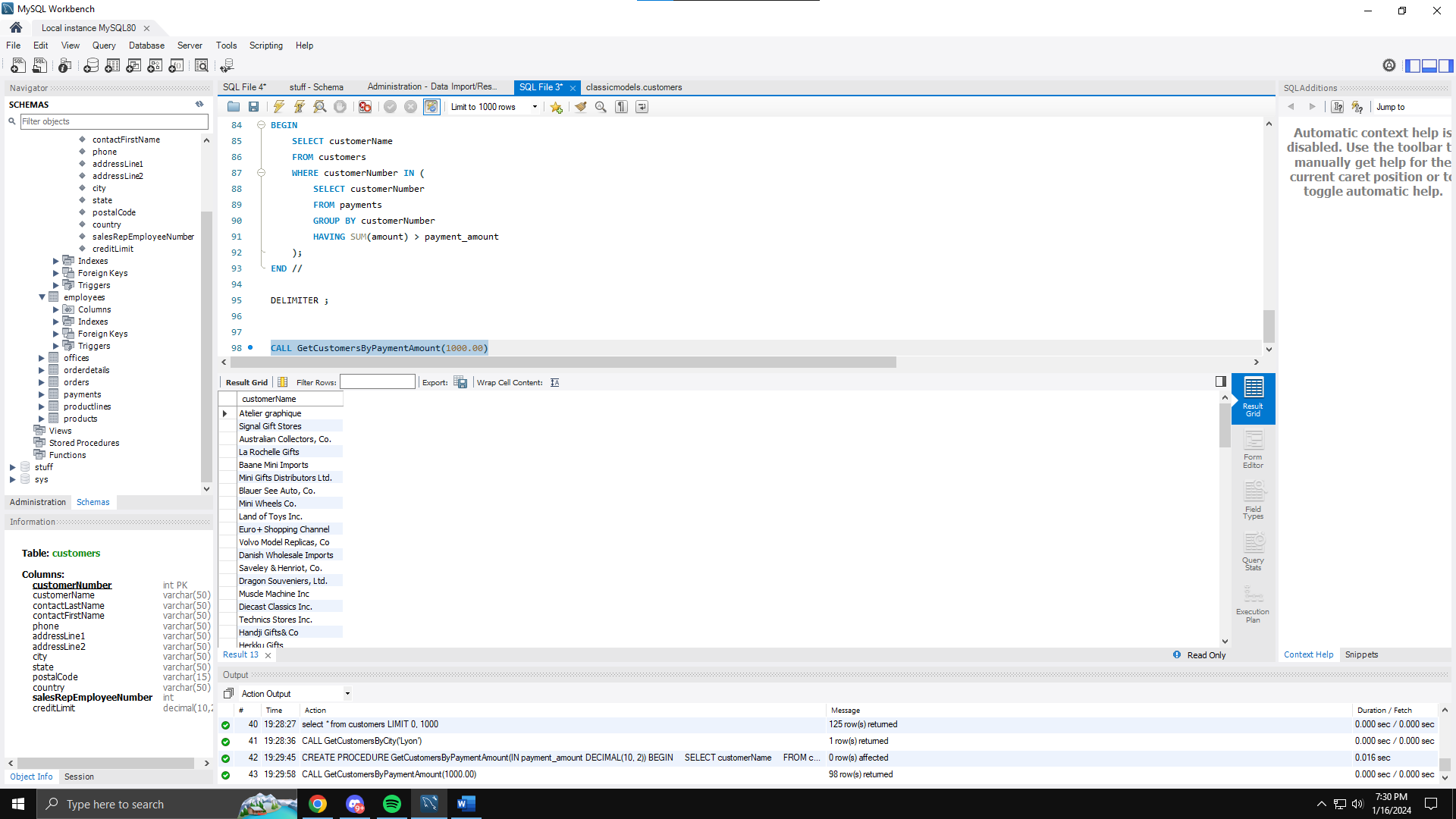
HAVING SUM(amount) > payment\_amount

);

END //

DELIMITER ;

CALL GetCustomersByPaymentAmount(1000.00)



* 1. Modify procedure from step 7 , amount to be input parameter, and output parameter to be number of customers (for Home)

1. Create new DB and move only customers from Italy into a new table CustomersItaly

CREATE DATABASE IF NOT EXISTS new\_database;

USE new\_database;

CREATE TABLE IF NOT EXISTS CustomersItaly AS

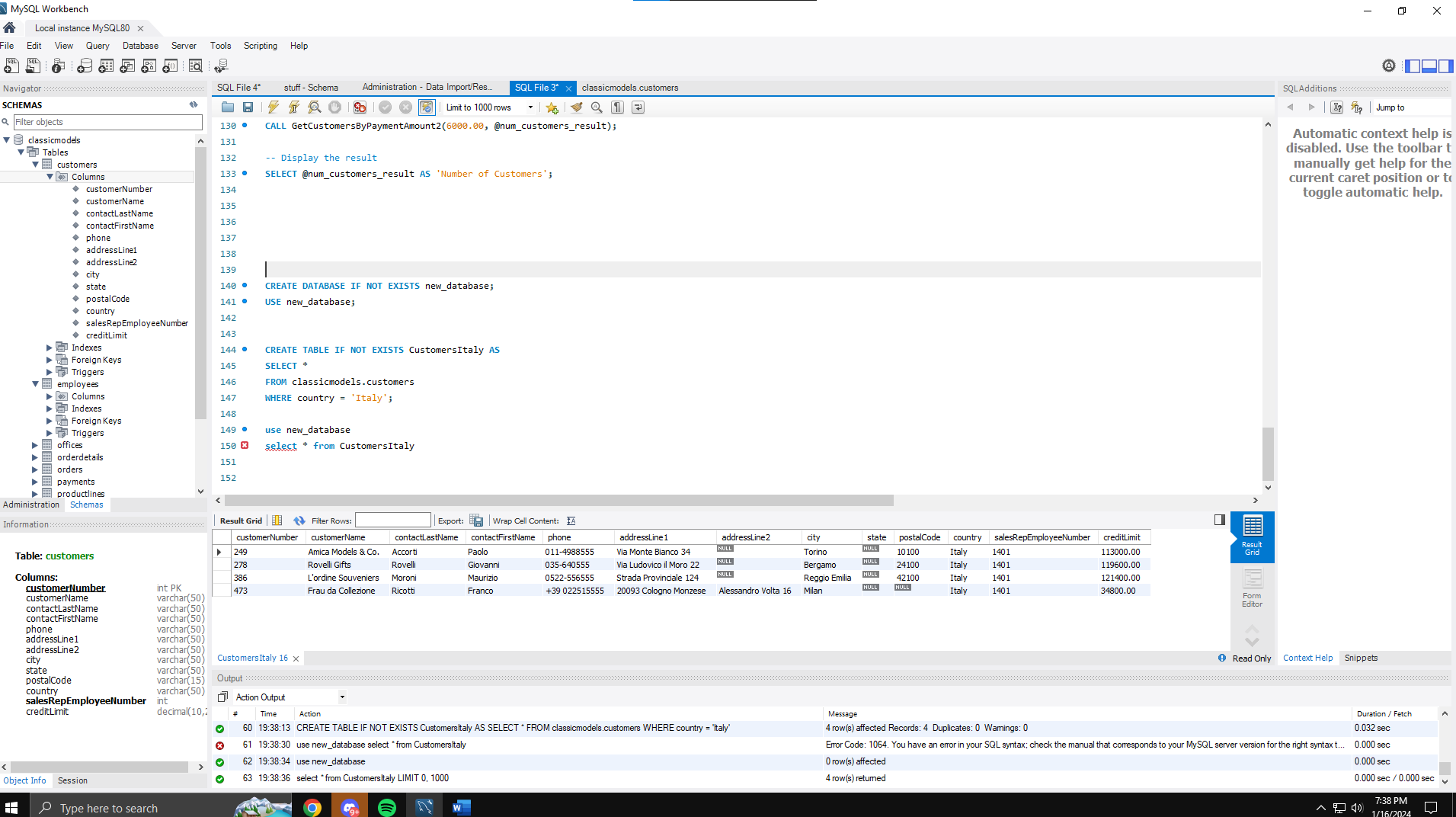
SELECT \*

FROM classicmodels.customers

WHERE country = 'Italy';

use new\_database

select \* from CustomersItaly



1. Crete trigger to catch before updates in table Employees (you need to have additional table for trigger execution)

use classicmodels

CREATE TABLE IF NOT EXISTS trigger\_log (

id INT AUTO\_INCREMENT PRIMARY KEY,

table\_name VARCHAR(255),

action VARCHAR(255),

timestamp TIMESTAMP

);

DELIMITER //

CREATE TRIGGER before\_update\_employees

BEFORE UPDATE ON employees

FOR EACH ROW

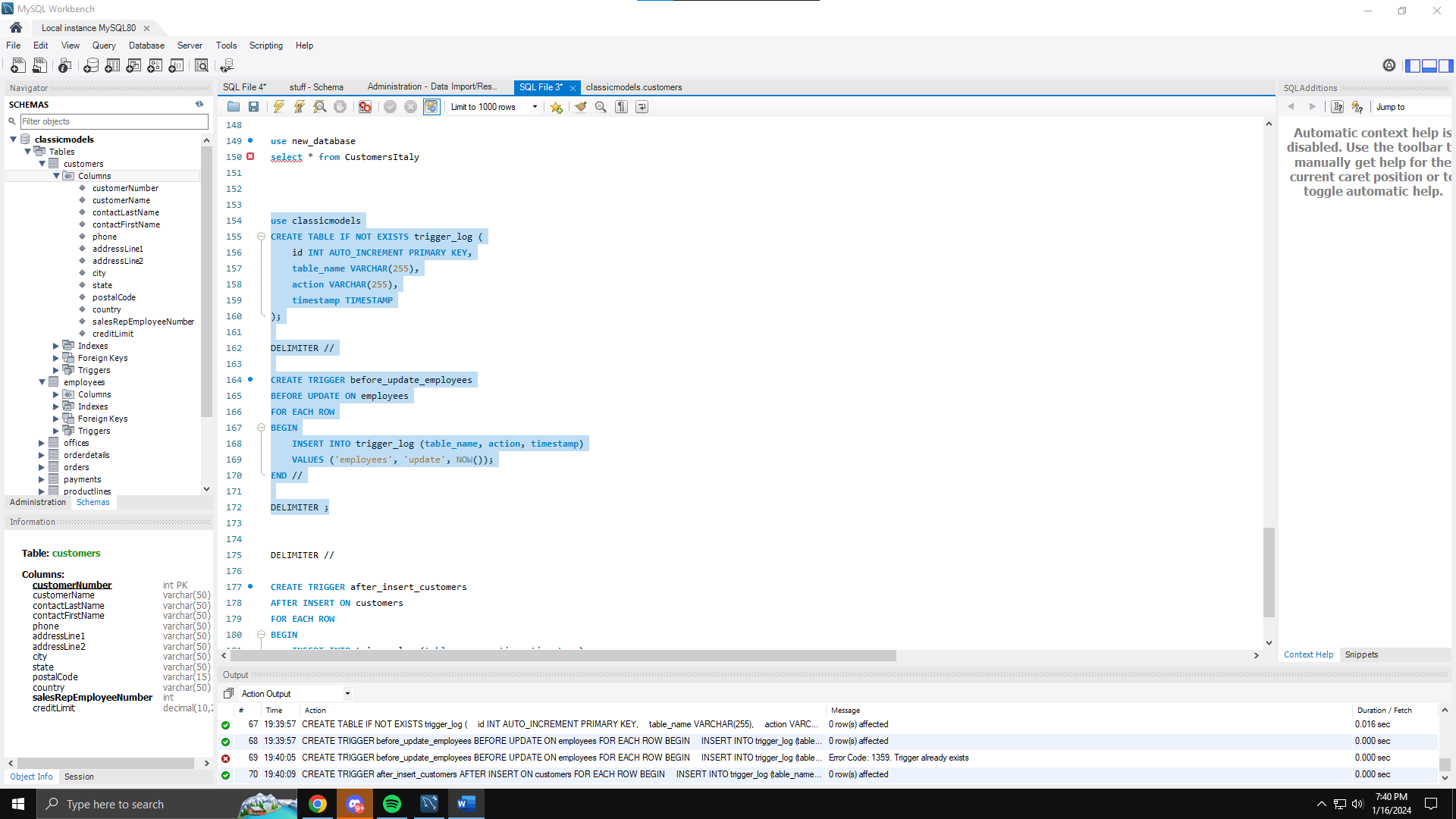
BEGIN

INSERT INTO trigger\_log (table\_name, action, timestamp)

VALUES ('employees', 'update', NOW());

END //

DELIMITER ;



1. Crete trigger to catch after insert in table Customers (you need to have additional table for trigger execution)

DELIMITER //

CREATE TRIGGER after\_insert\_customers

AFTER INSERT ON customers

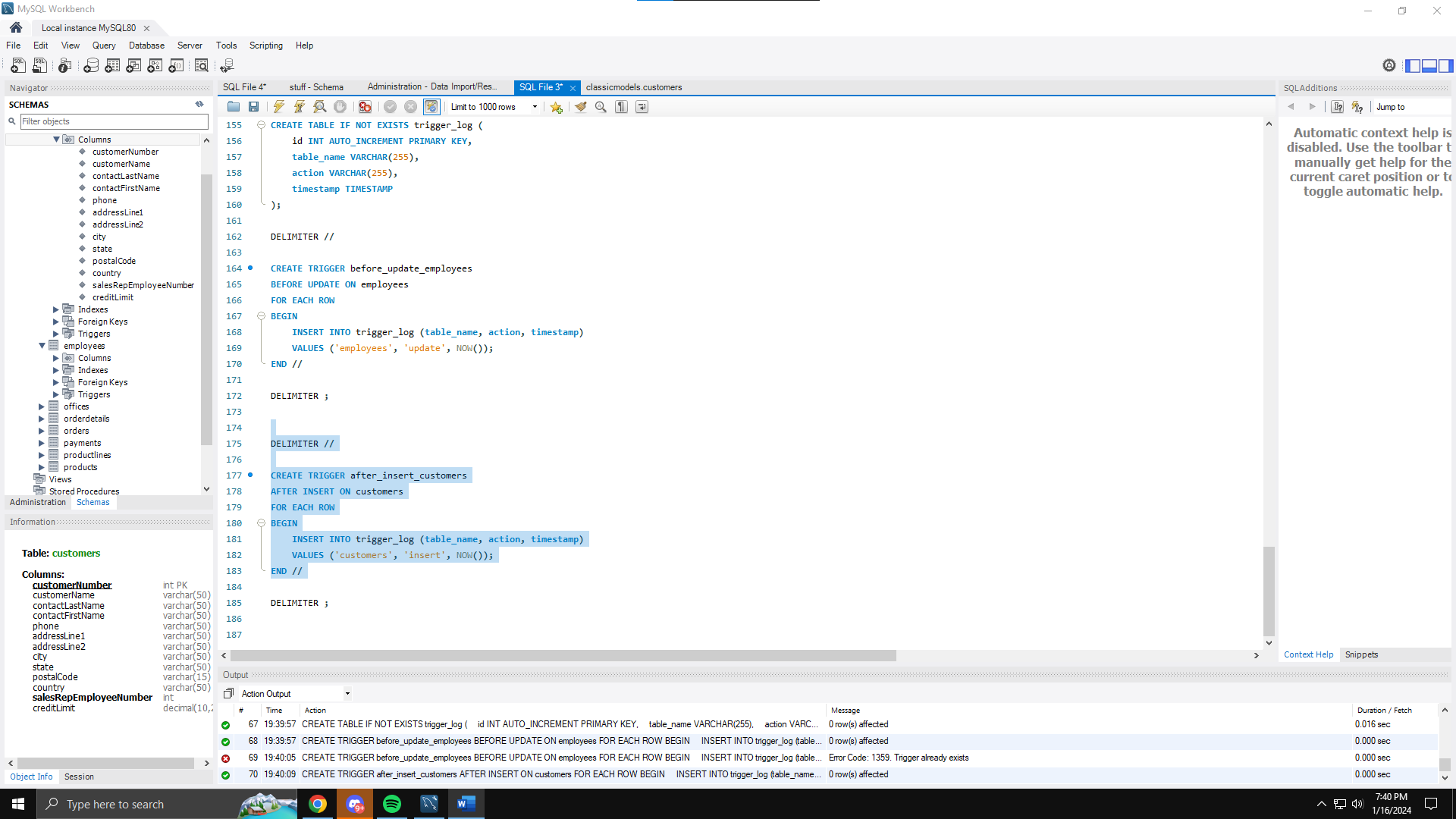
FOR EACH ROW

BEGIN

INSERT INTO trigger\_log (table\_name, action, timestamp)

VALUES ('customers', 'insert', NOW());

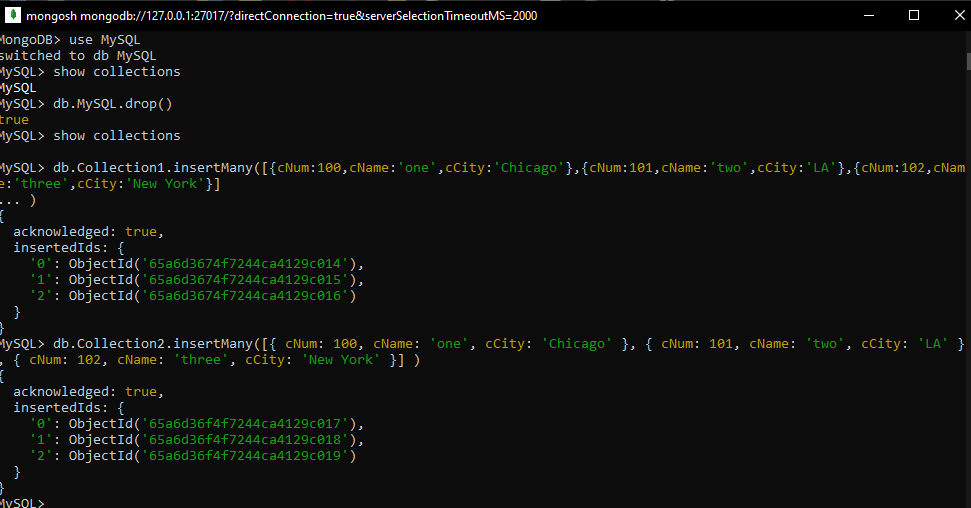
END //



1. Create dump backup from working database

**MongoDB**

1. Create new DB FinalTermTest
2. Create 2 collections MySQL and MongoDB
3. Insert 3 rows in each collection



Note: for all steps you need to provide sql command, files and screens from successful execution. Test the triggers using appropriate insert/update statements. Send the word/pdf/txt file, table definition if you’re use additional table, views, trigger and store procedure definitions, output with info for the records from successful trigger test SQL query’s used for moved data to another DB.

Save all info in on folder ID and send thif zip file to [igor.janchev@uacs.edu.mk](mailto:igor.janchev@uacs.edu.mk)