1)

Code:

DROP TABLE IF EXISTS w5q1\_co;

CREATE DATABASE w5q1\_co;

USE w5q1\_co;

CREATE TABLE Employee (

Emp\_No INT,

Emp\_Name VARCHAR(30),

sex VARCHAR(10),

Salary INT,

Address VARCHAR(100),

Dept\_No INT

);

INSERT INTO Employee VALUES

(26, 'Simon L Messerly', 'male', 41000, '4971, Hillcrest Lane, Moreno Valley, California', 291),

(29, 'Leroy A Preston', 'male', 104000, '1034 Lyon Avenue, Framingham, Massachusetts', 170),

(56, 'Juanita J Tomlin', 'female', 53000, '2101 Hedge Street, Branchburg, New Jersey', 817),

(60, 'William J Welton', 'male', 26000, '1475 Sundown Lane, Austin, Texas', 752),

(25, 'Dianne P Saulsbury', 'female', 53000, '4089 Bernardo Street, Polk City, Florida', 868),

(34, 'Amy I Taylor', 'female', 57000, '2946 Meadowbrook Mall Road, Playa Del Rey, California', 291),

(40, 'Keith J Williams', 'male', 41000, '936 Clousson Road, HACKENSACK, New Jersey', 817),

(22, 'Homer K Linger', 'male', 77000, '4626 Larry Street, NOVELTY, Missouri', 623),

(66, 'Helga J Beck', 'female', 71000, '3904 Metz Lane, Cambridge, Massachusetts', 170),

(36, 'William S Burnett', 'male', 50000, '3409 Emily Renzelli Boulevard, Salinas, California', 291);

CREATE TABLE Department (

Dept\_No INT,

Dept\_Name VARCHAR(20),

Location VARCHAR(20)

);

INSERT INTO Department VALUES

(170, 'Technology', 'Massachusetts'),

(291, 'Entertainment', 'California'),

(752, 'Agriculture', 'Texas'),

(817, 'Sales', 'New Jersey'),

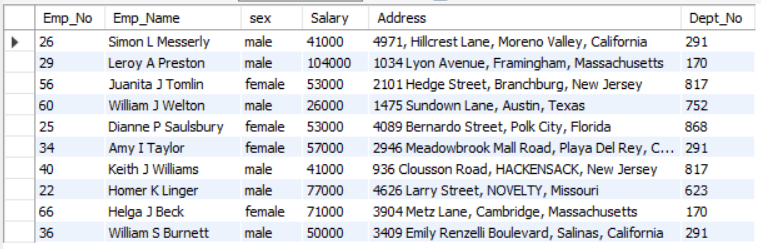
(623, 'Medical', 'Missouri'),

(868, 'Tourism', 'Florida');

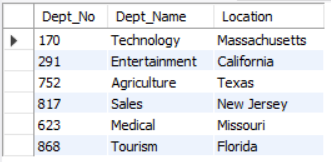
-- DROP DATABASE w5q1\_co;

Input:

* Employee Table



* Department Table



Queries & Outputs:

-- 1a) Write a procedure to display employee details given the Emp\_No.

-- CREATE PROCEDURE disp\_emp(IN eno INT)

-- SELECT \* FROM Employee

-- WHERE Emp\_no = eno;

-- CALL disp\_emp(60);

DELIMITER //

DROP PROCEDURE IF EXISTS show\_emp//

CREATE PROCEDURE show\_emp (IN eno INT)

BEGIN

SELECT \* FROM Employee WHERE Emp\_No = eno;

END//

DELIMITER ;

CALL show\_emp(60);



-- 1b) Write a procedure to delete an employee record given the Emp\_Name.

DELIMITER //

DROP PROCEDURE IF EXISTS del\_emp//

CREATE PROCEDURE del\_emp(IN ename VARCHAR(30))

BEGIN

DELETE FROM Employee

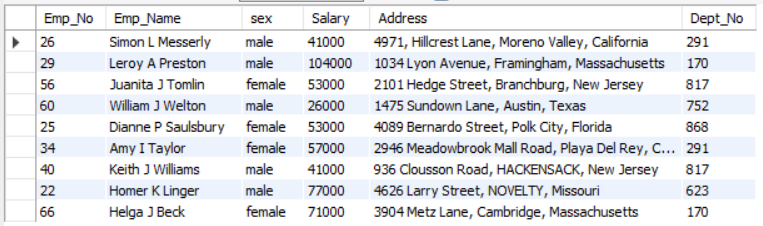
WHERE Emp\_name = ename;

END//

DELIMITER ;

CALL del\_emp('William S Burnett');

SELECT \* FROM Employee;



-- 1c) Write a procedure to list all the employee names belonging to a particular department given

-- the Dept\_No.

DELIMITER //

DROP PROCEDURE IF EXISTS disp\_emp\_dept//

CREATE PROCEDURE disp\_emp\_dept(IN dept INT)

BEGIN

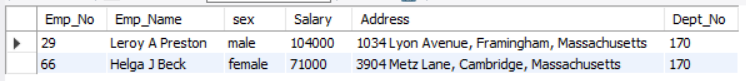
SELECT \* FROM Employee

WHERE Dept\_No = dept;

END//

DELIMITER ;

CALL disp\_emp\_dept(170);



-- 1d) Write a procedure to display the number of employees whose salary is greater than 30K.

DELIMITER //

DROP PROCEDURE IF EXISTS sal\_30k//

CREATE PROCEDURE sal\_30k(OUT numEmp INT)

BEGIN

SELECT COUNT(Emp\_No) INTO numEmp FROM Employee

WHERE Salary > 30E3;

END//

DELIMITER ;

CALL sal\_30k(@N);

SELECT @N as Num\_Of\_Employees;



2)

Code:

DROP DATABASE IF EXISTS w5q2\_sasalele;

CREATE DATABASE w5q2\_sasalele;

USE w5q2\_sasalele;

CREATE TABLE Customer(

customer\_id int,

cust\_name varchar(50),

city varchar(25),

grade int,

salesman\_id int

);

INSERT INTO Customer(customer\_id, cust\_name, city, grade, salesman\_id) VALUES

(3002, 'Nick Rimando', 'New York', 100, 5001),

(3007, 'Brad Davis', 'New York', 200, 5001),

(3005, 'Graham Zusi', 'California', 200, 5002),

(3008, 'Julian Green', 'London', 300, 5002),

(3004, 'Fabian Johnson', 'Paris', 300, 5006),

(3009, 'Geoff Cameron', 'Berlin', 100, 5003),

(3003, 'Jozy Altidor', 'Moscow', 200, 5007),

(3001, 'Brad Guzan', 'London', 300, 5005);

CREATE TABLE Orders(

ord\_no int,

purch\_amt double,

ord\_date date,

salesman\_id int,

customer\_id int

);

INSERT INTO Orders(ord\_no,purch\_amt,ord\_date,customer\_id,salesman\_id) VALUES

(70001, 150.5, '2012-10-05', 3005, 5002),

(70009, 270.65, '2012-09-10', 3001, 5005),

(70002, 65.26, '2012-10-05', 3002, 5001),

(70004, 110.5, '2012-08-17', 3009, 5003),

(70007, 948.5, '2012-09-10', 3005, 5002),

(70005, 2400.6, '2012-07-27', 3007, 5001),

(70008, 5760, '2012-09-10', 3002, 5001),

(70010, 1983.43, '2012-10-10', 3004, 5006),

(70003, 2480.4, '2012-10-10', 3009, 5003),

(70012, 250.45, '2012-06-27', 3008, 5002),

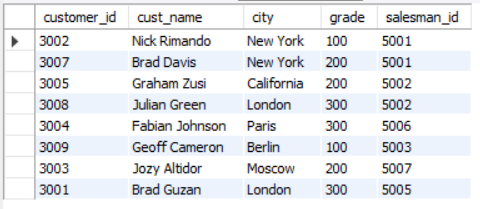
(70011, 75.29, '2012-08-17', 3003, 5007),

(70013, 3045.6, '2012-04-25', 3002, 5001);

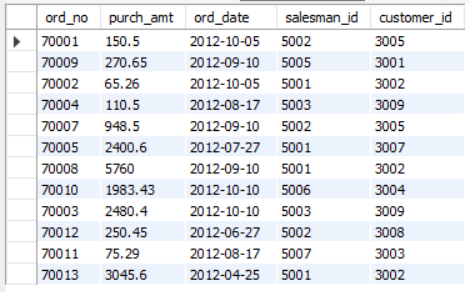
-- DROP DATABASE w5q2\_sasalele;

Table:

* Customer Table



* Orders Table



Queries & Outputs:

-- 2a) Use SQL functions to find the highest purchaseamount ordered by each customer with theirID and highest purchase amount.

DELIMITER //

CREATE FUNCTION max\_purch\_amt(c\_id int)

RETURNS DECIMAL(10,2) DETERMINISTIC

BEGIN

DECLARE max\_amt DECIMAL(10,2);

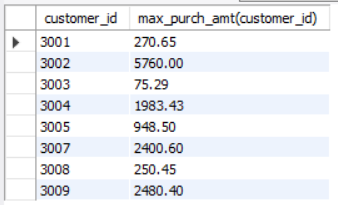
SELECT MAX(purch\_amt) INTO max\_amt FROM Orders WHERE customer\_id = c\_id;

RETURN max\_amt;

END //

DELIMITER ;

SELECT customer\_id, max\_purch\_amt(customer\_id) FROM Orders GROUP BY customer\_id;



-- 2b) Use SQL functions to find the number of customers in each city

DELIMITER //

DROP FUNCTION IF EXISTS cust\_per\_city//

CREATE FUNCTION cust\_per\_city(city\_name VARCHAR(20))

RETURNS INT DETERMINISTIC

BEGIN

DECLARE CNT INT;

-- SET CNT = 0;

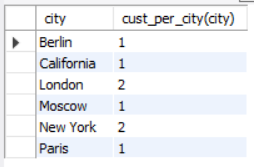
SELECT COUNT(\*) INTO CNT FROM Customer WHERE city = city\_name;

RETURN CNT;

END //

DELIMITER ;

SELECT city, cust\_per\_city(city) FROM Customer GROUP BY city;



-- 2c) Write a user defined function to display customer details given the customer\_id.

DELIMITER //

DROP PROCEDURE IF EXISTS disp\_cust\_info //

CREATE PROCEDURE disp\_cust\_info(IN customer\_id\_in INT)

BEGIN

SELECT \* FROM Customer WHERE customer\_id = customer\_id\_in;

END //

DELIMITER ;

CALL disp\_cust\_info(3002);



-- 2d) Write a user defined function to decrease the purch\_amt of an order by 5% given the ord\_no.

DELIMITER //

DROP FUNCTION IF EXISTS dec\_purch\_amt //

CREATE FUNCTION dec\_purch\_amt(orderno INT)

RETURNS DOUBLE DETERMINISTIC

BEGIN

DECLARE purch\_amt\_new DOUBLE;

SELECT purch\_amt INTO purch\_amt\_new FROM Orders WHERE ord\_no = orderno;

RETURN (purch\_amt\_new \* 0.95);

END //

DELIMITER ;

UPDATE Orders SET purch\_amt = dec\_purch\_amt(ord\_no) WHERE ord\_no = 70001;

SELECT \* FROM Orders;

