/\*Problem Statement 8(Cursors)

Consider the following schema for Products table.

Products(Product\_id, Product\_Name, Product\_Type, Price)

1.Write a parameterized cursor to display all products in the given price range of price

and type ‘Apparel’.

Hint: Take the user input for minimum and maximum price for price range.

2.Write an explicit cursor to display information of all products with Price grater than

5000.

3.Write an implicit cursor to display to display the number of records affected by the

update operation incrementing Price of all products by 1000.\*/

create database cursors;

use cursors;

drop database cursors;

CREATE TABLE Products (

product\_id INT PRIMARY KEY,

product\_name VARCHAR(100),

product\_type VARCHAR(50),

price DECIMAL(10, 2)

);

INSERT INTO Products (product\_id, product\_name, product\_type, price) VALUES

(1, 'T-Shirt', 'Apparel', 2500.00),

(2, 'Jeans', 'Apparel', 4500.00),

(3, 'Sneakers', 'Footwear', 6000.00),

(4, 'Jacket', 'Apparel', 7000.00),

(5, 'Laptop', 'Electronics', 12000.00),

(6, 'Wool Sweater', 'Apparel', 5500.00),

(7, 'Smartphone', 'Electronics', 8000.00),

(8, 'Baseball Cap', 'Apparel', 1500.00),

(9, 'Backpack', 'Accessories', 3500.00),

(10, 'Formal Shirt', 'Apparel', 3000.00);

DELIMITER $$

CREATE PROCEDURE GetProductsByPriceRange(IN min\_price DECIMAL(10,2), IN max\_price DECIMAL(10,2))

BEGIN

DECLARE done INT DEFAULT FALSE;

DECLARE p\_id INT;

DECLARE p\_name VARCHAR(100);

DECLARE p\_type VARCHAR(50);

DECLARE p\_price DECIMAL(10,2);

DECLARE product\_cursor CURSOR FOR

SELECT product\_id, product\_name, product\_type, price

FROM Products

WHERE price BETWEEN min\_price AND max\_price AND product\_type = 'Apparel';

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;

OPEN product\_cursor;

read\_loop: LOOP

FETCH product\_cursor INTO p\_id, p\_name, p\_type, p\_price;

IF done THEN

LEAVE read\_loop;

END IF;

SELECT p\_id, p\_name, p\_type, p\_price;

END LOOP;

CLOSE product\_cursor;

END $$

DELIMITER ;

DELIMITER $$

CREATE PROCEDURE GetExpensiveProducts()

BEGIN

DECLARE done INT DEFAULT FALSE;

DECLARE p\_id INT;

DECLARE p\_name VARCHAR(100);

DECLARE p\_type VARCHAR(50);

DECLARE p\_price DECIMAL(10,2);

DECLARE expensive\_product\_cursor CURSOR FOR

SELECT product\_id, product\_name, product\_type, price

FROM Products

WHERE price > 5000;

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;

OPEN expensive\_product\_cursor;

read\_loop: LOOP

FETCH expensive\_product\_cursor INTO p\_id, p\_name, p\_type, p\_price;

IF done THEN

LEAVE read\_loop;

END IF;

SELECT p\_id, p\_name, p\_type, p\_price;

END LOOP;

CLOSE expensive\_product\_cursor;

END $$

DELIMITER ;

DELIMITER $$

CREATE PROCEDURE UpdateProductPrices()

BEGIN

UPDATE Products

SET price = price + 1000;

-- Get the number of affected rows using LAST\_INSERT\_ID or ROW\_COUNT depending on the DBMS.

SELECT ROW\_COUNT() AS affected\_rows;

END $$

DELIMITER ;

CALL GetProductsByPriceRange(1000, 3000);

CALL GetExpensiveProducts();

CALL UpdateProductPrices();

SET SQL\_SAFE\_UPDATES = 0;