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Subject :- DBMS

Lab Assignment 7

Question 1

```
DELIMITER $$
CREATE PROCEDURE InsertIntoCustomer(
    IN in_name VARCHAR(255),
    IN in_city VARCHAR(100)
)
    INSERT INTO Customer (name, city) VALUES (in_name, in_city);
END$$
DELIMITER ;
Question 2
 -- Question 2
 DROP PROCEDURE IF EXISTS InsertIntoCustomer;
Question 3
 DELIMITER $$
CREATE PROCEDURE CalculateSumAndMultiplication(
    IN num1 INT,
    IN num2 INT,
    OUT sum_result INT,
     OUT multiplication_result INT
. )
BEGIN
     SET sum_result = num1 + num2;
     SET multiplication_result = num1 * num2;
END$$
DELIMITER;
Question 4
DELIMITER $$
CREATE PROCEDURE CalculateSquareRoot(
     IN number FLOAT,
     OUT sqrt_result FLOAT
)
BEGIN
     SET sqrt_result = SQRT(number);
END$$
DELIMITER ;
Question 5
```

```
DELIMITER $$
CREATE PROCEDURE CountCharacters(
     IN input_string VARCHAR(255),
     OUT char_count INT
-)
BEGIN
     SET char_count = LENGTH(input_string);
- END$$
 DELIMITER ;
Question 6
DELIMITER $$
CREATE PROCEDURE CalculateFactorial(
    IN number INT,
    OUT factorial_result BIGINT
)
BEGIN
    DECLARE i INT DEFAULT 1;
    DECLARE fact BIGINT DEFAULT 1;
    WHILE i <= number DO
       SET fact = fact * i;
       SET i = i + 1;
    END WHILE;
    SET factorial_result = fact;
DELIMITER ;
Question 7
DELIMITER $$
CREATE PROCEDURE UpdateCustomerName(
    IN old_name VARCHAR(255),
    IN new_name VARCHAR(255)
)
BEGIN
    UPDATE Customer
    SET name = new_name
    WHERE name = old_name;
END$$
DELIMITER ;
```

Question 8

```
DELIMITER $$
CREATE PROCEDURE CheckLoanStatus(
     IN customer_id INT,
     OUT has_loan VARCHAR(3)
)
BEGIN
     IF EXISTS (SELECT 1 FROM Loan WHERE customer_id = customer_id) THEN
         SET has_loan = 'Yes';
     ELSE
         SET has_loan = 'No';
     END IF;
END$$
 DELIMITER;
Question 9
DELIMITER $$
 CREATE PROCEDURE DisplayOrInsertCustomer(
    IN in_customer_id INT,
    IN in_name VARCHAR(255),
    IN in_city VARCHAR(100)
 )
 BEGIN
    DECLARE customer_exists INT;
    SELECT COUNT(*) INTO customer_exists FROM Customer WHERE customer_id = in_customer_id;
    IF customer_exists > 0 THEN
         SELECT city FROM Customer WHERE customer_id = in_customer_id;
     ELSE
         INSERT INTO Customer (customer_id, name, city) VALUES (in_customer_id, in_name, in_city);
         SELECT 'New customer inserted' AS Message;
     END IF;
 END$$
 DELIMITER;
Question 10
 DELIMITER $$
 CREATE PROCEDURE AccountsAboveBalance(
     IN balance_limit DECIMAL(10, 2)
 )
 BEGIN
    SELECT account_number
    FROM Account
     WHERE balance > balance_limit;
 END$$
 DELIMITER ;
```