Task 8 - Stored Procedures

Consider the Worker table with following fields:

* Worker\_Id INT
* FirstName CHAR(25),
* LastName CHAR(25),
* Salary INT(15),
* JoiningDate DATETIME,
* Department CHAR(25))

1. Create a stored procedure that takes in IN parameters for all the columns in the Worker table and adds a new record to the table and then invokes the procedure call.  
  
2. Write stored procedure takes in an IN parameter for WORKER\_ID and an OUT parameter for SALARY. It should retrieve the salary of the worker with the given ID and returns it in the p\_salary parameter. Then make the procedure call.  
  
3. Create a stored procedure that takes in IN parameters for WORKER\_ID and DEPARTMENT. It should update the department of the worker with the given ID. Then make a procedure call.  
  
4. Write a stored procedure that takes in an IN parameter for DEPARTMENT and an OUT parameter for p\_workerCount. It should retrieve the number of workers in the given department and returns it in the p\_workerCount parameter. Make procedure call.  
  
5. Write a stored procedure that takes in an IN parameter for DEPARTMENT and an OUT parameter for p\_avgSalary. It should retrieve the average salary of all workers in the given department and returns it in the p\_avgSalary parameter and call the procedure.

CREATE DATABASE WORKERS;

USE WORKERS;

CREATE TABLE Worker (

Worker\_Id INT ,

FirstName CHAR(25) ,

LastName CHAR(25) ,

Salary INT(15) ,

JoiningDate DATETIME ,

Department CHAR(25));

select \*FROM WORKER;

INSERT INTO Worker (Worker\_Id, FirstName, LastName, Salary, JoiningDate, Department) VALUES

(1, 'John', 'Doe', 50000, '2012-01-01', 'HR'),

(2, 'bob', 'th', 68000, '2019-08-11', 'Finance'),

(3, 'Sam', 'ben', 75000, '2018-05-01', 'IT'),

(4, 'John', 'Doe', 50000, '2020-01-01', 'HR'),

(5, 'Jane', 'Smith', 60000, '2021-02-01', 'Finance'),

(6, 'savi', 'Brown', 70000, '2022-03-01', 'IT');

select \*FROM WORKER;

DELIMITER //

CREATE PROCEDURE AddWorker (

IN p\_Worker\_Id INT,

IN p\_FirstName CHAR(25),

IN p\_LastName CHAR(25),

IN p\_Salary INT(15),

IN p\_JoiningDate DATETIME,

IN p\_Department CHAR(25)

)

BEGIN

INSERT INTO Worker (Worker\_Id, FirstName, LastName, Salary, JoiningDate, Department)

VALUES (p\_Worker\_Id, p\_FirstName, p\_LastName, p\_Salary, p\_JoiningDate, p\_Department);

END //

DELIMITER ;

CALL AddWorker(7, 'Alice', 'Johnson', 80000, '2023-04-01', 'Marketing');

select \*FROM WORKER;

DELIMITER //

CREATE PROCEDURE GetSalary (

IN p\_Worker\_Id INT,

OUT p\_Salary INT

)

BEGIN

SELECT Salary INTO p\_Salary FROM Worker WHERE Worker\_Id = p\_Worker\_Id;

END //

DELIMITER ;

CALL GetSalary(5, @p\_Salary);

SELECT @p\_Salary;

DELIMITER //

CREATE PROCEDURE UpdateDepartment (

IN p\_Worker\_Id INT,

IN p\_Department CHAR(25)

)

BEGIN

UPDATE Worker SET Department = p\_Department WHERE Worker\_Id = p\_Worker\_Id;

END //

DELIMITER ;

CALL UpdateDepartment(2, 'Marketing');

select \*FROM WORKER;

DELIMITER //

CREATE PROCEDURE Updatesalary (

IN p\_Worker\_Id INT,

IN p\_salary int )

BEGIN

UPDATE Worker SET salary = p\_salary WHERE Worker\_Id = p\_Worker\_Id;

END //

DELIMITER ;

CALL Updatesalary(2, '75000');

select \*FROM WORKER;

DELIMITER //

CREATE PROCEDURE GetWorkerCountByDepartment (

IN p\_Department CHAR(25),

OUT p\_WorkerCount INT

)

BEGIN

SELECT COUNT(\*) INTO p\_WorkerCount FROM Worker WHERE Department = p\_Department;

END //

DELIMITER ;

CALL GetWorkerCountByDepartment('IT', @p\_WorkerCount);

SELECT @p\_WorkerCount;

DELIMITER //

CREATE PROCEDURE GetAvgSalaryByDepartment (

IN p\_Department CHAR(25),

OUT p\_AvgSalary FLOAT

)

BEGIN

SELECT AVG(Salary) INTO p\_AvgSalary FROM Worker WHERE Department = p\_Department;

END //

DELIMITER ;

CALL GetAvgSalaryByDepartment('Finance', @p\_AvgSalary);

SELECT @p\_AvgSalary;

CALL GetAvgSalaryByDepartment('HR', @p\_AvgSalary);

SELECT @p\_AvgSalary;

CALL GetAvgSalaryByDepartment('Marketing', @p\_AvgSalary);

SELECT @p\_AvgSalary;

CALL GetAvgSalaryByDepartment('IT', @p\_AvgSalary);

SELECT @p\_AvgSalary;





















