

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.

```
11  -- Q1
12  DELIMITER $$
13
14  CREATE PROCEDURE AddWorker(
15      IN p_Worker_Id INT,
16      IN p_FirstName CHAR(25),
17      IN p_LastName CHAR(25),
18      IN p_Salary INT,
19      IN p_JoiningDate DATETIME,
20      IN p_Department CHAR(25)
21  )
22  BEGIN
23      INSERT INTO Worker (Worker_Id, FirstName, LastName, Salary, JoiningDate, Department)
24      VALUES (p_Worker_Id, p_FirstName, p_LastName, p_Salary, p_JoiningDate, p_Department);
25  END$$
26
27  DELIMITER ;
28
29
30  CALL AddWorker(1, 'John', 'Doe', 50000, '2024-11-25 10:00:00', 'HR');
```

Worker_Id	FirstName	LastName	Salary	JoiningDate	Department
1	John	Doe	50000	2024-11-25 10:00:00	HR
2	Jane	Smith	60000	2023-10-15 09:30:00	Finance
3	Alice	Brown	55000	2022-08-20 14:00:00	IT
4	Bob	Johnson	45000	2021-12-01 08:15:00	HR

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.

```
39      -- Q2
40      DELIMITER $$
41
42  ● ○ CREATE PROCEDURE GetWorkerSalary(
43      IN p_Worker_Id INT,
44      OUT p_Salary INT
45  )
46  ○ BEGIN
47      SELECT Salary INTO p_Salary
48      FROM Worker
49      WHERE Worker_Id = p_Worker_Id;
50  END$$
51
52      DELIMITER ;
53
54
55  ● SET @worker_id = 1;
56  ● SET @salary = 0;
57  ● CALL GetWorkerSalary(@worker_id, @salary);
58  ● SELECT @salary AS WorkerSalary;
```

WorkerSalary
50000

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.

```
60      -- Q3
61      DELIMITER $$
62
63 • ○ CREATE PROCEDURE UpdateWorkerDepartment(
64      |     IN p_Worker_Id INT,
65      |     IN p_Department CHAR(25)
66      | )
67 ○ BEGIN
68      |     UPDATE Worker
69      |     SET Department = p_Department
70      |     WHERE Worker_Id = p_Worker_Id;
71      | END$$
72
73      DELIMITER ;
74
75
76 • CALL UpdateWorkerDepartment(1, 'Finance');
```

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.

```
78      -- Q4
79      DELIMITER $$
80
81 • CREATE PROCEDURE GetWorkerCount(
82     IN p_Department CHAR(25),
83     OUT p_WorkerCount INT
84 )
85 BEGIN
86     SELECT COUNT(*) INTO p_WorkerCount
87     FROM Worker
88     WHERE Department = p_Department;
89 END$$
90
91 DELIMITER ;
92
93
94 • SET @department = 'Finance';
95 • SET @worker_count = 0;
96 • CALL GetWorkerCount(@department, @worker_count);
97 • SELECT @worker_count AS WorkerCount;
98
```

WorkerCount
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2

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.

```
99      -- Q5
100
101      DELIMITER $$
102
103      CREATE PROCEDURE GetAverageSalary(
104          IN p_Department CHAR(25),
105          OUT p_AvgSalary FLOAT
106      )
107      BEGIN
108          SELECT AVG(Salary) INTO p_AvgSalary
109          FROM Worker
110          WHERE Department = p_Department;
111      END$$
112
113      DELIMITER ;
114
115      SET @department = 'HR';
116      SET @avg_salary = 0;
117      CALL GetAverageSalary(@department, @avg_salary);
118      SELECT @avg_salary AS AverageSalary;
```

AverageSalary
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55000
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