

ASSIGNMENT- 3 DBMS

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1. Create a procedure to reset all employee salaries to 50000.

```
use pgdac;
drop procedure if exists reset;
DELIMITER //
CREATE PROCEDURE reset( )
BEGIN
SET SQL_SAFE_UPDATES = 0;
update emp set sal='50000';  SET
SQL_SAFE_UPDATES = 1;
select*from emp;
END //
DELIMITER //
CALL reset();
```

The screenshot shows a MySQL Workbench result grid with the following data:

	emp_id	name	salary	department
▶	1	Alice	50000.00	HR
	2	Bob	50000.00	IT
	3	Charlie	50000.00	Finance
*	NULL	NULL	NULL	NULL

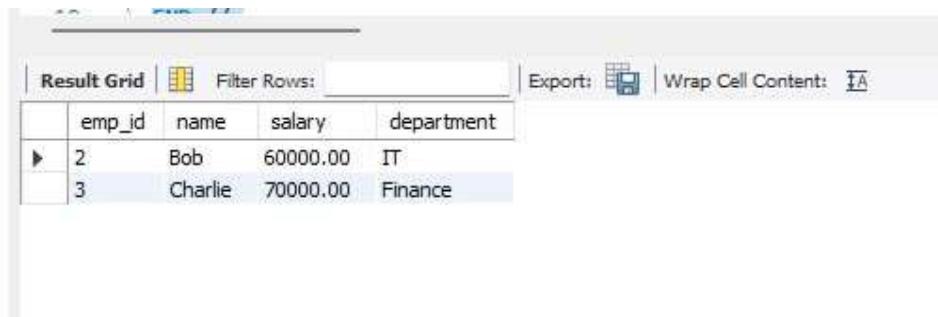
2. Create a procedure to delete all employees in the HR department.

```
use labdb;
```

```

drop procedure if exists deleteHR;
DELIMITER //
CREATE PROCEDURE deleteHR( )
BEGIN
    SET SQL_SAFE_UPDATES = 0;
    delete from employees where department='HR';
    SET SQL_SAFE_UPDATES = 1;  select*from
employees;
END //
DELIMITER //
CALL deleteHR();

```



The screenshot shows a MySQL Workbench interface with a result grid. The grid has columns: emp_id, name, salary, and department. There are two rows of data: one for Bob (emp_id 2) and one for Charlie (emp_id 3). Bob's salary is 60000.00 and department is IT. Charlie's salary is 70000.00 and department is Finance.

	emp_id	name	salary	department
▶	2	Bob	60000.00	IT
	3	Charlie	70000.00	Finance

3. Create a procedure to increase all employee salaries by 5%.

```

use labdb;
drop procedure if exists increaseSal;
DELIMITER //
CREATE PROCEDURE increaseSal( )
BEGIN
    SET SQL_SAFE_UPDATES = 0;
    update employees set salary=salary+(salary*0.05);

```

```

SET SQL_SAFE_UPDATES = 1;
select*from employees;
END //
DELIMITER //
CALL increaseSal();

```

	emp_id	name	salary	department
▶	2	Bob	63000.00	IT
	3	Charlie	73500.00	Finance

4. Create a procedure to insert a new employee (IN parameters).

```

use labdb;
drop procedure if exists insertEmp;
DELIMITER //
CREATE PROCEDURE insertEmp(in id int,in name varchar(40),in salary
decimal(10,2),in department varchar(50) )
BEGIN
SET SQL_SAFE_UPDATES = 0;
insert into employees values(id,name,salary,department);
SET SQL_SAFE_UPDATES = 1;  select*from employees;
END //
DELIMITER //
CALL insertEmp(4,'David',60000.00,'Sales');

```

The screenshot shows a 'Result Grid' window with the following data:

	emp_id	name	salary	department
▶	2	Bob	63000.00	IT
	3	Charlie	73500.00	Finance
	4	David	60000.00	Sales

5. Create a procedure to insert a new department (IN parameters).

```
use labdb;
drop procedure if exists dept_insertion; DELIMITER //
create procedure dept_insertion(in id int,in dept_name varchar(20),in location
varchar(20)) begin
SET SQL_SAFE_UPDATES = 0;
insert into departments values(id,dept_name,location);
SET SQL_SAFE_UPDATES = 1; select * from
departments; end// 
DELIMITER ;
CALL dept_insertion(4,'Accounting','Vizag');
```

The screenshot shows a 'Result Grid' window with the following data:

	dept_id	dept_name	location
▶	1	HR	Hyderabad
	2	IT	Bangalore
	3	Finance	Delhi
	4	Accounting	Vizag

6. Create a procedure to delete an employee by name (IN parameter).

```
use labdb;  
drop procedure if exists delete_employee; DELIMITER  
//  
create procedure delete_employee(in del_name varchar(20)) begin  
SET SQL_SAFE_UPDATES = 0;  
delete from employees where del_name=name;  
SET SQL_SAFE_UPDATES = 1; select * from  
employees; end//  
DELIMITER ;  
CALL delete_employee('Bob');
```



A screenshot of a MySQL Workbench interface showing a result grid. The grid has columns labeled 'emp_id', 'name', 'salary', and 'department'. There are two rows of data: one for employee ID 3 named Charlie with salary 73500.00 in the Finance department, and another for employee ID 4 named David with salary 60000.00 in the Sales department.

	emp_id	name	salary	department
▶	3	Charlie	73500.00	Finance
	4	David	60000.00	Sales

7. Create a procedure to change an employee's department (IN parameters).

```
use labdb;  
drop procedure if exists change_department; DELIMITER  
//
```

```

create procedure change_department(in p_name varchar(20),in new_dept
varchar(20)) begin

SET SQL_SAFE_UPDATES = 0;
update employees set
department=new_dept
where name=p_name;
select * from employees;
end//;

DELIMITER ;
CALL change_department('Alice','HR');

```

	emp_id	name	salary	department
▶	3	Charlie	73500.00	Finance
	4	David	60000.00	Sales

8. Create a procedure to get the highest salary (OUT parameter).

```

use labdb;
drop procedure if exists highest_salary; delimiter //
create procedure highest_salary(out largest_salary decimal(10,2)) begin
select max(salary) into largest_salary from employees;
end // delimiter ; call highest_salary(@sal); select
@sal as highest_sal;

```

	highest_sal
▶	73500.00

9. Create a procedure to get average salary (OUT parameter).

```
use labdb;  
drop procedure if exists average_salary; delimiter  
//  
create procedure average_salary(out average_salary decimal(10,2)) begin  
select avg(salary) into average_salary from employees;  
end // delimiter ; call average_salary(@sal);  
  
select @sal as average_sal;
```

Result Grid	
	average_sal
▶	66750.00

10. Create a procedure to get department count (OUT parameter).

```
use labdb;  
drop procedure if exists dept_count; delimiter  
//  
create procedure dept_count(out count_dept int) begin  
select count(*) into count_dept from departments;  
end // delimiter ; call dept_count(@count); select  
@count as counter;
```

	counter
▶	4

11. Create a procedure to get an employee's name by ID (IN and OUT parameter).

```
use labdb;  
drop procedure if exists fetch_name; delimiter  
//  
create procedure fetch_name(in id int , out emp_name varchar(20)) begin  
select name into emp_name from employees where emp_id=id;  
end // delimiter ;  
call fetch_name(3,@names); select  
@names as resultname;
```

	resultname
▶	Charlie

12. Create a procedure to increase salary of an employee by a given percentage (IN parameters).

```
use labdb;  
drop procedure if exists increaseSalary;  
DELIMITER //  
CREATE PROCEDURE increaseSalary(in percent decimal(4,2) )  
BEGIN  
SET SQL_SAFE_UPDATES = 0;
```

```

update employees set salary=salary+(salary*(percent/100));

SET SQL_SAFE_UPDATES = 1; select*from employees;

END //

DELIMITER //

CALL increaseSalary(30);

```

	emp_id	name	salary	department
▶	1	Alice	65000.00	HR
	2	Bob	78000.00	IT
	3	Charlie	91000.00	Finance

13. Create a procedure to add a bonus to an employee and return updated salary (INOUT parameter).

```

use labdb;

drop procedure if exists updateSalary;

DELIMITER //

CREATE PROCEDURE updateSalary(in id int,inout sal decimal(10,2) )

BEGIN

SET SQL_SAFE_UPDATES = 0;

update employees set salary=salary+sal where emp_id=id;

SET SQL_SAFE_UPDATES = 1;

select salary into sal from employees where emp_id=id;

```

```

END // DELIMITER
// set
@salary=3000;
CALL
updateSalary(1,@
salary); select
@salary as
Updated_Salary;

/*select * from employees;*/

```

Result Grid		Filter Rows:
	Updated_Salary	
▶	89000.00	

14. Create a procedure to move an employee to another department and return new department name (INOUT parameter).

```

use labdb;
drop procedure if exists changeDepartment;
DELIMITER //
CREATE PROCEDURE changeDepartment(in id int,inout dept varchar(30) )
BEGIN
SET SQL_SAFE_UPDATES = 0;
update employees set department=dept where emp_id=id;

```

```

SET SQL_SAFE_UPDATES = 1;

select department into dept from employees where emp_id=id;

END //

DELIMITER // set

@dept='IT';

CALL

changeDepartm

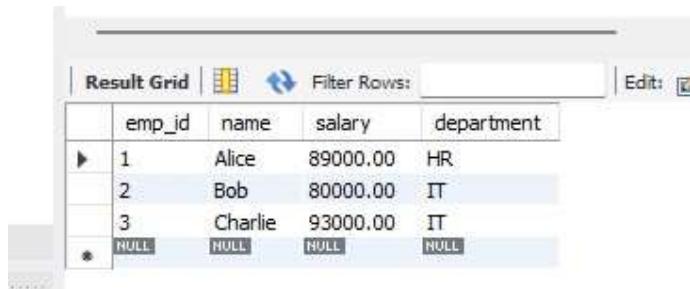
ent(3,@dept);

select @dept as

New_Dept;

```

```
select * from employees;
```



The screenshot shows a MySQL Workbench result grid with the following data:

	emp_id	name	salary	department
▶	1	Alice	89000.00	HR
	2	Bob	80000.00	IT
	3	Charlie	93000.00	IT
*	NULL	NULL	NULL	NULL

15. Create a procedure to change department location and return updated location (INOUT parameter).

```

use labdb;

drop procedure if exists changeLocation;

```

```

DELIMITER //

CREATE PROCEDURE changeLocation(in id int,inout loc varchar(30) )

BEGIN

SET SQL_SAFE_UPDATES = 0;

update departments set location=loc where dept_id=id;

SET SQL_SAFE_UPDATES = 1;

select location into loc from departments where dept_id=id;

END // DELIMITER // set

@loc='Chennai'; CALL

changeLocation(1,@loc);

select @loc as New_loc;

select * from departments;

```

	dept_id	dept_name	location
▶	1	HR	Chennai
	2	IT	Bangalore
	3	Finance	Delhi

16. Create a procedure to show employees earning above a given salary (IN parameter).

```

use labdb;

drop procedure if exists empAboveGivenSal;

DELIMITER //

```

```

CREATE PROCEDURE empAboveGivenSal(in sal int )
BEGIN

SET SQL_SAFE_UPDATES = 0;

select*from employees where salary>sal;

SET SQL_SAFE_UPDATES = 1;

END //
DELIMITER //
CALL empAboveGivenSal(85000);

```

	emp_id	name	salary	department
▶	1	Alice	89000.00	HR
	3	Charlie	93000.00	IT

17. Create a procedure to show all departments in a specific location (IN parameter).

```

use labdb;
drop procedure if exists deptLoc;
DELIMITER //
CREATE PROCEDURE deptLoc(in loc varchar(20) )
BEGIN

```

```

SET SQL_SAFE_UPDATES = 0;

select*from departments where location=loc;
SET SQL_SAFE_UPDATES = 1;

END //
```

DELIMITER //

```
CALL deptLoc('Bangalore');
```

	dept_id	dept_name	location
▶	2	IT	Bangalore

18. Create a procedure to delete a department by name (IN parameter).

```

use labdb;
drop procedure if exists deleteDept;
DELIMITER //
CREATE PROCEDURE deleteDept(in name varchar(20) )
BEGIN

SET SQL_SAFE_UPDATES = 0;
```

```

delete from departments where dept_name=name;
select*from departments;
SET SQL_SAFE_UPDATES = 1;

END ///
DELIMITER ///
CALL deleteDept('HR');

```

The screenshot shows a 'Result Grid' window from MySQL Workbench. The grid displays two rows of data from a 'departments' table. The columns are labeled 'dept_id', 'dept_name', and 'location'. The data is as follows:

	dept_id	dept_name	location
▶	2	IT	Bangalore
	3	Finance	Delhi

19. Create a procedure to find the total salary paid in a department (IN and OUT parameter).

```

use labdb;
drop procedure if exists totalSalDept;
DELIMITER ///
CREATE PROCEDURE totalSalDept(in deptName varchar(20),out sal
decimal(10,2) )
BEGIN
SET SQL_SAFE_UPDATES = 0;
select sum(salary) into sal from employees where department=deptName ;

```

```

SET SQL_SAFE_UPDATES = 1;

END //

DELIMITER //

CALL totalSalDept('IT',@totalSal); select
@totalSal as TotalDeptSalary;

```

Result Grid		Filter Rows:
	TotalDeptSalary	
▶	173000.00	

20. Create a procedure to find the minimum salary and return it (OUT parameter).

```

use labdb;

drop procedure if exists minSal;

DELIMITER //

CREATE PROCEDURE minSal(out sal decimal(10,2) )

BEGIN

SET SQL_SAFE_UPDATES = 0;

select min(salary) into sal from employees ;

SET SQL_SAFE_UPDATES = 1;

```

```
END //  
DELIMITER // CALL  
minSal(@mSal); select @mSal as  
minimumSalary;
```

Result Grid		Filter Rows:
	minimumSalary	
▶	80000.00	