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DBMS LAB – 07

QUESTION 1:

Q1:

```
mysql> delimiter //
mysql> create procedure q1(in str varchar(10),in str1 varchar(25),in bal int(10))
    -> begin
    -> insert into account values(str,str1,bal);
    -> select * from account;
    -> end //
Query OK, 0 rows affected, 1 warning (0.01 sec)
```

Q3:

```
mysql> DELIMITER //
mysql> create procedure addmul(in a int, in b int)
    -> begin
    -> select a+b as Sum;
    -> select a*b as Product;
    -> end //
Query OK, 0 rows affected (0.03 sec)

mysql> delimiter;
    ->  delimiter ;
    -> ^C
    -> ^C
mysql> delimiter ;
mysql> call addmul(2,3);
+------+
| Sum  |
+------+
|    5 |
+------+
1 row in set (0.00 sec)

+---------+
| Product |
+---------+
|       6 |
+---------+
1 row in set (0.01 sec)

Query OK, 0 rows affected (0.01 sec)
```

Q4:

```
mysql> delimiter //
mysql> create procedure square_root(in a int)
    ->  begin
    -> select sqrt(a) as Square_Root;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call square_root(64);
+-------------+
| Square_Root |
+-------------+
|           8 |
+-------------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

Q5:

```
mysql> delimiter //
mysql> create procedure str_len(in str varchar(50))
    -> begin
    -> select char_length(str) as String_Length;
    -> end //
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> call str_len('Abhinav');
+---------------+
| String_Length |
+---------------+
|             7 |
+---------------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

Q6:

```
mysql> delimiter //
mysql> create procedure fact(in a int)
    -> begin
    -> declare res int;
    -> declare i int;
    -> set res = 1;
    -> set i = 1;
    -> while i <= a do
    -> set res = res*i;
    -> set i = i+1;
    -> end while;
    ->  select res as Factorial;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call fact(6);
+-----------+
| Factorial |
+-----------+
|       720 |
+-----------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```

Q7:

```
mysql> delimiter //
mysql> create procedure question7(in name1 varchar(25),in name2 varchar(25))
    -> begin
    -> update customer
    -> set customername = name1 where customername = name2;
    -> end //
Query OK, 0 rows affected (0.00 sec)
```

Q8:

```
mysql> delimiter //
mysql>  create procedure q8(in cust_name varchar(200))
    -> begin
    -> declare present varchar(200);
    -> declare absent varchar(200);
    -> declare i int default 0;
    -> set present = "has loan";
    -> set absent ="doesn't have loan";
    -> select count(loan_number) into i from borrower where customer_name=cust_name;
    -> if i>0 then select present;
    -> else select absent;
    -> end if;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> call q8("Hayes") //
+----------+
| present  |
+----------+
| has loan |
+----------+
1 row in set (0.01 sec)
```

Q9:

```
mysql> delimiter //
mysql> create procedure q9(in cust_name varchar(200))
    -> begin
    -> declare present varchar(200);
    -> declare absent varchar(200);
    -> declare i int default 0;
    -> set present = "has loan";
    -> set absent ="doesn't have loan";
    -> select count(loan_number) into i from borrower where customer_name=cust_name;
    -> if i>0 then select present;
    ->  else select absent;
    -> end if;
    -> end //
Query OK, 0 rows affected (0.00 sec)

mysql> call q9("Adams") //
+----------+
| present  |
+----------+
| has loan |
+----------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> call q9("johny") //
+------------------+
| absent           |
+------------------+
| doesn't have loan |
+------------------+
1 row in set (0.01 sec)

Query OK, 0 rows affected (0.01 sec)
```

Q10:

```
mysql> delimiter //
mysql> create procedure balance(in a int)
    -> begin
    -> select accountnumber from account_relation where balance > a;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call balance(100);
+---------------+
| accountnumber |
+---------------+
| A-101         |
| A-102         |
| A-201         |
| A-215         |
| A-217         |
| A-222         |
| A-305         |
| 123           |
+---------------+
8 rows in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

QUESTION 2:

Q1:

```
mysql> delimiter //
mysql> create procedure question2_1(in id int)
    -> begin
    -> select emp_name,emp_dept,income from employee where emp_id=id;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call question2_1(2505);
+----------+----------+--------+
| emp_name | emp_dept | income |
+----------+----------+--------+
| peter    | finance  | 100000 |
+----------+----------+--------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

mysql>
```

Q2:

```
mysql> delimiter //
mysql> create procedure DeptSal(in dnumb int)
    -> begin
    -> select emp_dept,sum(salary) as tot_sal from employees where emp_dept = dnumb;
    -> end//
Query OK, 0 rows affected (0.01 sec)

mysql> call DeptSal('100');
    -> //
+----------+---------+
| emp_dept | tot_sal |
+----------+---------+
|      100 |   51608 |
+----------+---------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```

Q3:

```
mysql> delimiter //
mysql> create procedure NameDeptAge(in dnumb int)
    -> begin
    -> select emp_name,emp_desig,age from employees where emp_dept = dnumb;
    -> end//
Query OK, 0 rows affected (0.01 sec)

mysql> call NameDeptAge(100);
    -> //
+-------------+------------+-----+
| emp_name    | emp_desig  | age |
+-------------+------------+-----+
| Nancy       | FI_MGR     |  27 |
| Daniel      | FI_ACCOUNT |  24 |
| John        | FI_ACCOUNT |  27 |
| Ismael      | FI_ACCOUNT |  29 |
| Jose Manuel | FI_ACCOUNT |  33 |
| Luis        | FI_ACCOUNT |  39 |
+-------------+------------+-----+
6 rows in set (0.00 sec)

Query OK, 0 rows affected (0.07 sec)
```

Q4:

```
mysql> delimiter //
mysql> create procedure EmpGrade(in dnumb int)
    -> begin
    -> select grade,count(emp_id) from employees where emp_dept = dnumb group by grade order by grade;
    -> end//
Query OK, 0 rows affected (0.01 sec)

mysql> call EmpGrade(60);
    -> //
+-------+---------------+
| grade | count(emp_id) |
+-------+---------------+
|     1 |             2 |
|     2 |             2 |
|     3 |             1 |
+-------+---------------+
3 rows in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)
```

Q5:

```
mysql> delimiter //
mysql> create  procedure q5(in a int)
    -> begin
    -> select a*a as Square;
    -> end //
Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;
mysql> call q5(5);
+--------+
| Square |
+--------+
|     25 |
+--------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```