

A5

Name: Pranay Shankarrao Chavhan

Roll No: 31412

mysql> insert into stud_marks values

-> (1, 'Pranay', 1500),

-> (2, 'Sai', 900),

-> (3, 'Durvesh', 1200),

-> (4, 'Ayush', 980),

-> (5, 'Poonam', 1100),

-> (6, 'Om', 900),

-> (7, 'Mansy', 1500);

Query OK, 7 rows affected (0.02 sec)

Records: 7 Duplicates: 0 Warnings: 0

```
mysql> select * from stud_marks;
+-----+-----+-----+
| roll_no | name   | total_marks |
+-----+-----+-----+
| 1       | Pranay | 1500        |
| 2       | Sai    | 900         |
| 3       | Durvesh | 1200        |
| 4       | Ayush  | 980         |
| 5       | Poonam | 1100        |
| 6       | Om     | 900         |
| 7       | Mansy  | 1500        |
+-----+-----+-----+
7 rows in set (0.00 sec)
```

mysql> create table result (

-> roll_no int primary key,

-> name varchar(255),

-> class varchar(255));

Query OK, 0 rows affected (0.04 sec)

```

mysql> CREATE PROCEDURE procedure_1(IN marks INT, OUT class
VARCHAR(255))
-> BEGIN
->   DECLARE marks_not_found CONDITION FOR SQLSTATE '45000';
->
->   -- Declare a variable to check if marks are found
->   DECLARE marks_found BOOLEAN DEFAULT FALSE;
->
->   -- Check if marks is NULL or not provided
->   IF marks IS NULL THEN
->     SIGNAL SQLSTATE '45000'
->     SET MESSAGE_TEXT = 'Marks not provided or NULL';
->   ELSE
->     -- Set marks_found to TRUE to indicate that marks are found
->     SET marks_found = TRUE;
->
->     IF marks <= 1500 AND marks >= 990 THEN
->       SET class = 'DISTINCTION';
->     ELSEIF marks <= 989 AND marks >= 900 THEN
->       SET class = 'FIRST CLASS';
->     ELSEIF marks <= 899 AND marks > 825 THEN
->       SET class = 'HIGHER SECOND CLASS';
->     ELSE
->       SET class = 'FAIL';
->     END IF;
->   END IF;
->
->   -- Check if marks were not found and raise an exception
->   IF NOT marks_found THEN
->     SIGNAL marks_not_found;
->   END IF;
-> END;
-> //
Query OK, 0 rows affected (0.02 sec)

```

```
mysql> create function final_result(roll_number int)
-> returns int
-> deterministic
-> begin
-> declare fmarks int;
-> declare grade varchar(20);
-> declare stud_name varchar(20);
-> select stud_marks.name, stud_marks.total_marks into stud_name, fmarks from
stud_marks where stud_marks.roll_no = roll_number;
-> call procedure_1(fmarks, grade);
-> insert into result values(roll_number, stud_name, grade);
-> return roll_number;
-> end;
-> //
```

Query OK, 0 rows affected (0.03 sec)

```
mysql> select final_result(1);
+-----+
| final_result(1) |
+-----+
|                1 |
+-----+
1 row in set (0.02 sec)
```

```
mysql> select final_result(3);
+-----+
| final_result(3) |
+-----+
|                3 |
+-----+
1 row in set (0.02 sec)
```

```
mysql> select final_result(5);
+-----+
| final_result(5) |
+-----+
|                5 |
+-----+
```

```
+-----+
1 row in set (0.02 sec)
```

```
mysql> select * from result;
+-----+-----+-----+
| roll_no | name      | class      |
+-----+-----+-----+
|        1 | Pranay    | DISTINCTION |
|        3 | Durvesh   | DISTINCTION |
|        5 | Poonam    | DISTINCTION |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> select final_result(2);
+-----+
| final_result(2) |
+-----+
|                2 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select * from result;
+-----+-----+-----+
| roll_no | name      | class      |
+-----+-----+-----+
|        1 | Pranay    | DISTINCTION |
|        2 | Sai       | FIRST CLASS |
|        3 | Durvesh   | DISTINCTION |
|        5 | Poonam    | DISTINCTION |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> update stud_marks set total_marks = 630 where roll_no = 4;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select final_result(4);
+-----+
| final_result(4) |
+-----+
```

```
+-----+
|          4 |
+-----+
1 row in set (0.02 sec)
```

```
mysql> select * from result;
+-----+-----+-----+
| roll_no | name      | class      |
+-----+-----+-----+
| 1 | Pranay   | DISTINCTION |
| 2 | Sai      | FIRST CLASS |
| 3 | Durvesh  | DISTINCTION |
| 4 | Ayush    | FAIL        |
| 5 | Poonam   | DISTINCTION |
| 7 | Mansy    | DISTINCTION |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> update stud_marks set total_marks = NULL where roll_no = 6;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from stud_marks;
+-----+-----+-----+
| roll_no | name      | total_marks |
+-----+-----+-----+
| 1 | Pranay   | 1500 |
| 2 | Sai      | 900 |
| 3 | Durvesh  | 1200 |
| 4 | Ayush    | 980 |
| 5 | Poonam   | 1100 |
| 6 | Om       | NULL |
| 7 | Mansy    | 1500 |
+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> select final_result(6);
ERROR 1644 (45000): Marks not provided or NULL
mysql>
```