

## Group A: Lab Assignment No.5

**TITLE: PL/SQL Stored Procedure and Stored Function.**

**Write a Stored Procedure namely proc\_Grade for the categorization of student. If marks scored by students in examination is  $\leq 1500$  and marks  $\geq 990$  then student will be placed in distinction category if marks scored are between 989 and 900 category is first class, if marks 899 and 825 category is Higher Second Class.**

**Write a PL/SQL block for using procedure created with above requirement.**

**Stud\_Marks(name, total\_marks)**

**Result(Roll, Name, Class)**

**Frame the separate problem statement for writing PL/SQL Stored Procedure and function, inline with above statement. The problem statement should clearly state the requirements.**

-----

```
mysql> create table marks(roll_no int,name varchar(20),total_marks  
varchar(20));
```

Query OK, 0 rows affected (0.67 sec)

```
mysql> create table result(roll_no int,name varchar(20),class varchar(20));
```

Query OK, 0 rows affected (0.41 sec)

```
mysql> insert into marks values('1','Abhi','1400');
```

Query OK, 1 row affected (0.04 sec)

```
mysql> insert into marks values('2','piyush','980');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> insert into marks values('3','hitesh','880');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> insert into marks values('4','ashley','820');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> insert into marks values('5','partik','740');
```

Query OK, 1 row affected (0.03 sec)

```
mysql> insert into marks values('6','patil','640');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> delimiter //
```

```
mysql> create procedure proc_result(in marks int,out class  
char(20))
```

```
-> begin
```

```
-> if(marks<1500&&marks>990)
```

```
-> then
```

```
-> set class='Distincton';
```

```
-> end if;
```

```
-> if(marks<989&&marks>890)
```

```
-> then
```

```
-> set class='First Class';
```

```
-> end if;
```

```
-> if(marks<889&&marks>825)
```

```
-> then
```

```
-> set class='Higher Second Class';
```

```
-> end if;
```

```
-> if(marks<824&&marks>750)
```

```
-> then
```

```
-> set class='Second Class';-> end if;if(marks<749&&marks>650)
```

```
-> then
```

```
-> set class='Passed';
```

```
-> end if;
```

```
-> if(marks<649)
```

```
-> then
```

```
-> set class='Fail';
```

```
-> end if;
```

```
-> end;
```

```
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> create function final_result3(R1 int)
```

```
-> returns int
```

```
-> begin
```

```
-> declare fmarks integer;
```

```
-> declare grade varchar(20);
```

```
-> declare stud_name varchar(20);
```

```
-> select marks.total_marks,marks.name into
```

```

fmarks,stud_name from marks where marks.roll_no=R1;
-> call proc_grade(fmarks,@grade);
-> insert into result values(R1,stud_name,@grade);
-> return R1;
-> end;
-> //

```

Query OK, 0 rows affected (0.00 sec)

```

mysql> select final_result3(2);

```

```

-> //

```

```

+-----+
| final_result3(2) |
+-----+
2 |

```

```

+-----+

```

1 row in set (0.05 sec)

```

mysql> select final_result3(3);//

```

```

+-----+
| final_result3(3) |
+-----+
|

```

```

3 |

```

```

+-----+

```

1 row in set (0.04 sec)

```

mysql> select final_result3(4);//

```

```

+-----+
| final_result3(4) |
+-----+
|

```

```

4 |

```

1 row in set (0.12 sec)

```

mysql> select final_result3(5);//

```

```

+-----+
| final_result3(5) |
+-----+
|

```

```

5 |

```

```

+-----+

```

1 row in set (0.05 sec)

**mysql> select \* from result;**

-> //

roll_no	name	class
1	NULL	Distincton
1	Abhi	Distincton
1	Abhi	Distincton
2	piyush	First Class
3	hitesh	Higher Second Class
4	ashley	Second Class
5	partik	Passed

7 rows in set (0.00 sec)