

**Group A: Lab Assignment No.7**

**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 <=1500 and marks>=990 then student will be placed in distinction category if marks scored are between 989 and900 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> use Abhi;**

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

**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)