Assignment – 6

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Roll no: 13165

Aim:-

Write a Stored Procedure namely proc_Grade for the categorization of student. If marks scoredby students in examination is <=1500 and marks>=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 to use procedure created with above requirement. Stud_Marks(name, total_marks) Result(Roll,Name, Class)

```
SQL> CREATE TABLE Stud_Marks (
  2     Roll NUMBER GENERATED BY DEFAULT AS IDENTITY,
  3     Name VARCHAR2(100),
  4     Total_Marks NUMBER
  5  );
Table created.
SQL> CREATE OR REPLACE PROCEDURE proc_Grade (
  2     Stud_Name IN VARCHAR2,
  3     Stud_Marks IN NUMBER,
  4     Result OUT SYS_REFCURSOR
  5  ) AS
  6     category VARCHAR2(50);
  7  BEGIN
  8     IF Stud_Marks >= 990 AND Stud_Marks <= 1500 THEN
  9        category := 'Distinction';
 10     ELSIF Stud_Marks >= 900 AND Stud_Marks <= 989 THEN
 11        category := 'First Class';
 12     ELSIF Stud_Marks >= 825 AND Stud_Marks <= 899 THEN
 13        category := 'Higher Second Class';
 14     ELSE
 15        category := 'Not Classified';
 16     END IF;
 17
```

```
 18    OPEN Result FOR
 19        SELECT Stud_Name AS Name,
 20               Stud_Marks AS Total_Marks,
 21               category AS Class
 22        FROM dual;
 23  END proc_Grade;
 24  /
Procedure created.
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> DECLARE
  2    TYPE StudentRecType IS RECORD (
  3        Name VARCHAR2(100),
  4        Marks NUMBER,
  5        Class VARCHAR2(50)
  6    );
  7
  8    TYPE StudentCurType IS REF CURSOR;
  9
 10    v_students SYS_REFCURSOR;
 11    v_student_rec StudentRecType;
 12    v_roll NUMBER := 1;
 13  BEGIN
 14        FOR student_data IN (
 15        SELECT 'Abhishek' AS Name, 950 AS Marks FROM dual
 16        UNION ALL
 17        SELECT 'Nikhil' AS Name, 1100 AS Marks FROM dual
 18        UNION ALL
 19        SELECT 'Anurag' AS Name, 850 AS Marks FROM dual
 20    )
 21    LOOP
```

```
22        proc_Grade(student_data.Name, student_data.Marks, v_students);
23
24
25        DBMS_OUTPUT.PUT_LINE('Student Result:');
26        DBMS_OUTPUT.PUT_LINE('Roll: ' || v_roll);
27        DBMS_OUTPUT.PUT_LINE('Name: ' || student_data.Name);
28
29
30        LOOP
31           FETCH v_students INTO v_student_rec.Name, v_student_rec.Marks, v_student_rec.Class;
32           EXIT WHEN v_students%NOTFOUND;
33           DBMS_OUTPUT.PUT_LINE('Class: ' || v_student_rec.Class);
34           DBMS_OUTPUT.PUT_LINE('Total Marks: ' || v_student_rec.Marks);
35        END LOOP;
36
37        CLOSE v_students;
38
39
40        v_roll := v_roll + 1;
41     END LOOP;
42  END;
43  /
Student Result:
Roll: 10
Name: Abhishek
Class: First Class
Total Marks: 950
Student Result:
Roll: 65
Name:Omkar
Class: Distinction
```

Total Marks: 1100

Student Result:

Roll: 55

Name: Ram

Class: Higher Second Class

Total Marks: 850

PL/SQL procedure successfully completed.