Named PL/SQL Block: PL/SQL Stored Procedure and Stored Function.

Write a Stored Procedure namely proc\_Grade for the categorization of student. If marks scoredby students in

examination is &lt;=1500 and marks&gt;=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)

ANS

1

-- Creating Stud\_Marks table to store students' names and total marks

CREATE TABLE Stud\_Marks (

name VARCHAR2(100),

total\_marks NUMBER

);

-- Creating Result table to store Roll number, Name, and Class

CREATE TABLE Result (

Roll NUMBER PRIMARY KEY,

Name VARCHAR2(100),

Class VARCHAR2(20)

);

2

CREATE SEQUENCE Result\_SEQ

START WITH 1

INCREMENT BY 1;

3

CREATE OR REPLACE PROCEDURE proc\_Grade (p\_name IN VARCHAR2, p\_total\_marks IN NUMBER) AS

v\_class VARCHAR2(20);

BEGIN

-- Categorizing the student based on marks

IF p\_total\_marks >= 990 AND p\_total\_marks <= 1500 THEN

v\_class := 'Distinction';

ELSIF p\_total\_marks >= 900 AND p\_total\_marks <= 989 THEN

v\_class := 'First Class';

ELSIF p\_total\_marks >= 825 AND p\_total\_marks <= 899 THEN

v\_class := 'Higher Second Class';

ELSE

v\_class := 'Failed'; -- For students with marks below 825

END IF;

-- Inserting the result into the Result table

INSERT INTO Result (Roll, Name, Class)

VALUES (Result\_SEQ.NEXTVAL, p\_name, v\_class);

COMMIT; -- Commit the transaction

END;

4

DECLARE

v\_name VARCHAR2(100);

v\_marks NUMBER;

BEGIN

-- Loop through all students in the Stud\_Marks table

FOR rec IN (SELECT name, total\_marks FROM Stud\_Marks) LOOP

v\_name := rec.name;

v\_marks := rec.total\_marks;

-- Call the proc\_Grade procedure to categorize the student

proc\_Grade(v\_name, v\_marks);

END LOOP;

COMMIT; -- Commit the transaction

END;

5

-- Inserting sample student marks

INSERT INTO Stud\_Marks (name, total\_marks) VALUES ('John Doe', 1200);

INSERT INTO Stud\_Marks (name, total\_marks) VALUES ('Jane Smith', 950);

INSERT INTO Stud\_Marks (name, total\_marks) VALUES ('Alice Brown', 880);

INSERT INTO Stud\_Marks (name, total\_marks) VALUES ('Bob White', 800);