-- Step 1: Create the Stud\_Marks table to store student name and total marks

CREATE TABLE Stud\_Marks (

name VARCHAR2(50),

total\_marks NUMBER

);

-- Step 2: Create the Result table to store the roll number, student name, and class category

CREATE TABLE Result (

Roll NUMBER,

Name VARCHAR2(50),

Class VARCHAR2(50)

);

-- Step 3: Create the proc\_Grade procedure

CREATE OR REPLACE PROCEDURE proc\_Grade(

p\_name IN VARCHAR2,

p\_total\_marks IN NUMBER,

p\_roll IN NUMBER

) IS

v\_class VARCHAR2(50);

BEGIN

-- Check the marks and categorize the student

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

v\_class := 'Distinction';

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

v\_class := 'First Class';

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

v\_class := 'Higher Second Class';

ELSE

v\_class := 'No Category'; -- In case marks don't fall into any category

END IF;

-- Insert the result into the Result table with manually assigned Roll number

INSERT INTO Result (Roll, Name, Class)

VALUES (p\_roll, p\_name, v\_class);

COMMIT;

END proc\_Grade;

-- Step 4: Insert sample student data into the Stud\_Marks table

INSERT INTO Stud\_Marks (name, total\_marks) VALUES ('John Doe', 1100);

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

INSERT INTO Stud\_Marks (name, total\_marks) VALUES ('Alice Brown', 875);

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

-- Step 5: PL/SQL Block to Call the Procedure and Insert Results

DECLARE

v\_name VARCHAR2(50);

v\_marks NUMBER;

v\_roll NUMBER := 1; -- Start with roll number 1

BEGIN

-- Process each student by calling the procedure

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, v\_roll);

-- Increment roll number for next student

v\_roll := v\_roll + 1;

END LOOP;

-- Commit the transaction to save the results

COMMIT;

END;