/\*Problem Statement 13 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 <=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)\*/

CREATE DATABASE StudentDB;

USE StudentDB;

CREATE TABLE Stud\_Marks (

name VARCHAR(100),

total\_marks INT

);

CREATE TABLE Result (

Roll INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100),

Class VARCHAR(50)

);

DELIMITER //

CREATE PROCEDURE proc\_Grade()

BEGIN

DECLARE done INT DEFAULT FALSE;

DECLARE v\_name VARCHAR(100);

DECLARE v\_marks INT;

DECLARE v\_class VARCHAR(50);

-- Cursor to iterate through each student

DECLARE student\_cursor CURSOR FOR

SELECT name, total\_marks FROM Stud\_Marks;

-- Handler for when there are no more rows to process

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;

-- Open the cursor

OPEN student\_cursor;

read\_loop: LOOP

-- Fetch student data

FETCH student\_cursor INTO v\_name, v\_marks;

IF done THEN

LEAVE read\_loop;

END IF;

-- Determine class based on total\_marks

IF v\_marks <= 1500 AND v\_marks >= 990 THEN

SET v\_class = 'Distinction';

ELSEIF v\_marks <= 989 AND v\_marks >= 900 THEN

SET v\_class = 'First Class';

ELSEIF v\_marks <= 899 AND v\_marks >= 825 THEN

SET v\_class = 'Higher Second Class';

ELSE

SET v\_class = 'No Category'; -- For marks below 825 or above 1500

END IF;

-- Insert the result into Result table

INSERT INTO Result (Name, Class) VALUES (v\_name, v\_class);

END LOOP;

-- Close the cursor

CLOSE student\_cursor;

END;

//

DELIMITER ;

-- Inserting sample data into Stud\_Marks

INSERT INTO Stud\_Marks (name, total\_marks) VALUES

('Alice', 1200),

('Bob', 950),

('Charlie', 870),

('David', 1500),

('Eve', 800);

-- Call the procedure to categorize students

CALL proc\_Grade();

-- Display the results

SELECT \* FROM Result;