CREATE TABLE stud\_marks(

name VARCHAR(50),

total\_marks INT

);

CREATE TABLE result (

roll INT PRIMARY KEY NOT NULL AUTO\_INCREMENT,

class VARCHAR(25) DEFAULT NULL,

name VARCHAR(50)

);

INSERT INTO stud\_marks VALUES

    ('Aarav', 756),

    ('Ishaan', 1253),

    ('Kavya', 755),

    ('Nandini', 1285),

    ('Rohit', 877),

    ('Sneha', 696),

    ('Vihaan', 1404),

    ('Aditi', 873),

    ('Pranav', 1353),

    ('Riya', 1154),

    ('Akshay', 619),

    ('Tara', 871),

    ('Raj', 808),

    ('Meera', 1108),

    ('Ananya', 1306),

    ('Yash', 1595),

    ('Saanvi', 705),

    ('Kabir', 783),

    ('Radhika', 821),

    ('Aryan', 753)

;

DELIMITER $$

-- Function to classify marks

CREATE FUNCTION IF NOT EXISTS classify (marks INT) RETURNS VARCHAR(50)

DETERMINISTIC

BEGIN

IF marks BETWEEN 990 AND 1500 THEN

RETURN 'Distinction';

ELSEIF marks BETWEEN 900 AND 989 THEN

RETURN 'First Class';

ELSEIF marks BETWEEN 825 AND 899 THEN

RETURN 'Higher Second Class';

ELSE

RETURN 'Pass';

END IF;

END $$

DELIMITER ;

CALL proc\_grade(900, 'Shantanu', 31380);

SELECT classify(1000);

DELIMITER $$

-- Procedure to check if student exists, insert if not, classify, and insert into result

CREATE PROCEDURE proc\_grade (IN stud\_name VARCHAR(50), IN roll INT, IN studmarks INT)

BEGIN

    DECLARE clss VARCHAR(25);

    DECLARE student\_exists INT;

    -- Check if the student already exists in the stud\_marks table

    SELECT COUNT(\*) INTO student\_exists FROM stud\_marks WHERE name = stud\_name;

    -- If student does not exist, insert the student name and marks into stud\_marks

    IF student\_exists = 0 THEN

        INSERT INTO stud\_marks (name, total\_marks) VALUES (stud\_name, studmarks);

    END IF;

    -- Classify the marks

    SET clss := classify(studmarks);

    -- Insert the result into the result table

    INSERT INTO result (roll, class, name) VALUES (roll, clss, stud\_name);

END $$

DELIMITER ;