**SOURCE CODE:**

CREATE TABLE Students

( studentId INT AUTO\_INCREMENT,

stName VARCHAR(30) NOT NULL,

email VARCHAR(40),

gpa FLOAT DEFAULT 0.0,

scholarship INT DEFAULT 0,

PRIMARY KEY (studentId),

CONSTRAINT CHECK\_GPA

CHECK (gpa BETWEEN 0 AND 4.3)

);

CREATE TABLE Courses

( courseId INT AUTO\_INCREMENT,

courseNumber VARCHAR(10) NOT NULL,

courseName VARCHAR(50) NOT NULL,

courseDescription VARCHAR(200),

creditHours INT DEFAULT 3,

approvedDate DATE,

PRIMARY KEY (courseId),

CONSTRAINT CHECK\_CREDIT\_HOUR

CHECK (creditHours BETWEEN 0 AND 6)

);

CREATE TABLE Enrollments

( studentId INT,

courseId INT,

letterGrade CHAR(2),

PRIMARY KEY (studentId, courseId),

FOREIGN KEY (studentId)

REFERENCES Students(studentId)

ON DELETE NO ACTION

ON UPDATE CASCADE,

FOREIGN KEY (courseId)

REFERENCES Courses(courseId)

ON DELETE NO ACTION

ON UPDATE CASCADE

);

DROP PROCEDURE AcceptStudent;

DELIMITER $$

CREATE PROCEDURE AcceptStudent(

studentName CHAR(30),

emailAddress CHAR(30),

highSchoolAvg FLOAT

)

BEGIN

DECLARE scholarship INT;

IF highSchoolAvg>100.0 OR highSchoolAvg<0.0 THEN

SIGNAL SQLSTATE '45001'

SET MESSAGE\_TEXT = 'Mark out of range!';

END IF;

IF highSchoolAvg > 90.0 THEN

SET scholarship = 1500;

ELSEIF highSchoolAvg > 85.0 THEN

SET scholarship = 1000;

ELSE

SET scholarship = 0;

END IF;

INSERT INTO Students(stName, email,scholarship) VALUE (studentName, emailAddress,scholarship);

END$$

DELIMITER ;

-- tests

CALL AcceptStudent('yulong wang', '123@unb.ca', 80.0);

CALL AcceptStudent('MAX', '123@unb.ca', 88.0);

CALL AcceptStudent('CHRIS', '123@unb.ca', 95.0);

CALL AcceptStudent('XXX', '123@unb.ca', 120.0);

SELECT \* FROM Students;

**TEST RESULT:**

**手机屏幕截图

描述已自动生成**

**表格

描述已自动生成**