 Week 5:

CREATE TABLE SubjectAllotments (

StudentId VARCHAR(50),

SubjectId VARCHAR(50),

Is\_Valid BIT

);

CREATE TABLE SubjectRequest (

StudentId VARCHAR(50),

SubjectId VARCHAR(50)

);

--procedure

CREATE PROCEDURE sp\_ProcessSubjectRequests

AS

BEGIN

DECLARE @StudentID VARCHAR(50);

DECLARE @RequestedSubjectID VARCHAR(50);

DECLARE request\_cursor CURSOR FOR

SELECT StudentId, SubjectId FROM SubjectRequest;

OPEN request\_cursor;

FETCH NEXT FROM request\_cursor INTO @StudentID, @RequestedSubjectID;

WHILE @@FETCH\_STATUS = 0

BEGIN

DECLARE @CurrentSubjectID VARCHAR(50);

SELECT @CurrentSubjectID = SubjectId

FROM SubjectAllotments

WHERE StudentId = @StudentID AND Is\_Valid = 1;

IF @CurrentSubjectID IS NULL

BEGIN

INSERT INTO SubjectAllotments (StudentId, SubjectId, Is\_Valid)

VALUES (@StudentID, @RequestedSubjectID, 1);

END

ELSE IF @CurrentSubjectID <> @RequestedSubjectID

BEGIN

UPDATE SubjectAllotments

SET Is\_Valid = 0

WHERE StudentId = @StudentID AND Is\_Valid = 1;

INSERT INTO SubjectAllotments (StudentId, SubjectId, Is\_Valid)

VALUES (@StudentID, @RequestedSubjectID, 1);

END

FETCH NEXT FROM request\_cursor INTO @StudentID, @RequestedSubjectID;

END

CLOSE request\_cursor;

DEALLOCATE request\_cursor;

END;

--Insertion

-- Existing subject allotments for a student

INSERT INTO SubjectAllotments VALUES ('159103036', 'PO1491', 1);

INSERT INTO SubjectAllotments VALUES ('159103036', 'PO1492', 0);

INSERT INTO SubjectAllotments VALUES ('159103036', 'PO1493', 0);

INSERT INTO SubjectAllotments VALUES ('159103036', 'PO1494', 0);

INSERT INTO SubjectAllotments VALUES ('159103036', 'PO1495', 0);

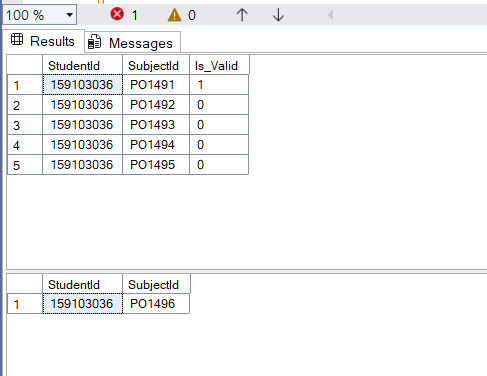
-- Student requests a new subject

INSERT INTO SubjectRequest VALUES ('159103036', 'PO1496');

--Preview

Select \* from SubjectAllotments;

Select \* from SubjectRequest;



--Execution

EXEC sp\_ProcessSubjectRequests;

