Problem Statement:

A college needs to develop a system that tracks the Open Elective Subjects of their students. During the start of the year a lot of students change their subjects and college wants to preserve that entire timeline of the data.

For example, Mohit had selected "Eco philosophy" as his Open Elective subject but later he wished to switch to "Basics of Accounting" in this scenario the college wants the visibility of Mohit's previous choice as well instead of just the active one:

There is one table that holds the record of this change, and it is called SubjectAllotments

The below table has the subject to student mapping with the preference

Note: The details of the columns are as following:

- StudentID varchar
- SubjectID varchar
- Is_Valid bit

StudentId	SubjectId	Is_valid
159103036	PO1491	1
159103036	PO1492	0
159103036	PO1493	0
159103036	PO1494	0
159103036	PO1495	0

(Table Name: SubjectAllotments)

In the above example we can see the student's active subject is "PO1491" but at some point the student was allotted other subjects.

When a student requests an allotment the request details are stored in a table called "SubjectRequest"

StudentId	SubjectId
159103036	PO1496

(Table Name: SubjectRequest)

We can see that the student has requested a change.

Here we have to check the current subject of the student (where is_valid=1) is different from the request or not, if the subject is different we insert another record in the table making the new record valid and changing the previously valid record to invalid, the output is indicated in the below table:

StudentId	SubjectId	Is_valid
159103036	PO1496	1
159103036	PO1491	0
159103036	PO1492	0
159103036	PO1493	0
159103036	PO1494	0
159103036	PO1495	0

(Table Name: SubjectAlottments)

If the student id that is present in the SubjectRequest Table does not exist in the SubjectAlottments table then we simply insert the requested subject as a valid record in the SubjectAllotments Table

Your Task is to write a Stored Procedure to implement the above stated workflow.