

Problem Statement:

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

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

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

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

StudentId	SubjectId
159103036	PO1496

Table Name: SubjectRequest

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 :SubjectAllotments