

Week 5 Answers

```
SELECT COUNT(*)  
FROM SubjectAllotments  
WHERE StudentId = '159103036';
```

```
UPDATE SubjectAllotments  
SET Is_valid = 0  
WHERE StudentId = '159103036' AND Is_valid = 1;
```

```
INSERT INTO SubjectAllotments (StudentId, SubjectId, Is_valid)  
VALUES ('159103036', 'PO1496', 1);
```

```
UPDATE SubjectAllotments  
SET Is_valid = 0  
WHERE StudentId = '159103036' AND Is_valid = 1;
```

```
-- Insert the new subject as valid  
INSERT INTO SubjectAllotments (StudentId, SubjectId, Is_valid)  
VALUES ('159103036', 'PO1496', 1);
```

```
BEGIN TRANSACTION;
```

```
-- Step 1: Update current valid subject to invalid if the student exists in SubjectAllotments
```

```
UPDATE SubjectAllotments  
SET Is_valid = 0  
WHERE StudentId IN (SELECT StudentId FROM SubjectRequest)  
AND Is_valid = 1;
```

```
-- Step 2: Insert the new subject as valid
```

```
INSERT INTO SubjectAllotments (StudentId, SubjectId, Is_valid)
SELECT sr.StudentId, sr.SubjectId, 1
FROM SubjectRequest sr
LEFT JOIN SubjectAllotments sa ON sr.StudentId = sa.StudentId AND sa.Is_valid = 1
WHERE sr.SubjectId <> sa.SubjectId OR sa.StudentId IS NULL;

COMMIT;
```