

SE Factory

Day 21 - Assignments

version 01BD_1603

Change Log

Delivery Deadline: Tuesday August 16th 2:00PM

Relational Databases

Exercise 1

Patients make legal claims against a medical institution, and the claims are recorded in the **Claims** table:

```
Claims
claim_id  patient_name
=====
1         'Bassem Dghaidi'
2         'Omar Breidi'
3         'Marwan Sawwan'
```

Each claim has one or more defendants, usually physicians, recorded in the table **Defendants**:

```
Defendants
claim_id  defendant_name
=====
1         'Jean Skaff'
1         'Elie Meouchi'
1         'Radwan Sameh'
2         'Joseph Eid'
2         'Paul Syoufi'
2         'Radwan Sameh'
3         'Issam Awwad'
```

Each defendant associated with a claim has a history of legal events, where changes in the claim status of the defendant on a given claim are recorded in **LegalEvents** table:

LegalEvents			
claim_id	defendant_name	claim_status	change_date
=====			
1	'Jean Skaff'	'AP'	'2016-01-01'
1	'Jean Skaff'	'OR'	'2016-02-02'
1	'Jean Skaff'	'SF'	'2016-03-01'
1	'Jean Skaff'	'CL'	'2016-04-01'
1	'Radwan Sameh'	'AP'	'2016-01-01'
1	'Radwan Sameh'	'OR'	'2016-02-02'
1	'Radwan Sameh'	'SF'	'2016-03-01'
1	'Elie Meouchi'	'AP'	'2016-01-01'
1	'Elie Meouchi'	'OR'	'2016-02-02'
2	'Radwan Sameh'	'AP'	'2016-01-01'
2	'Radwan Sameh'	'OR'	'2016-02-01'
2	'Paul Syoufi'	'AP'	'2016-01-01'
3	'Issam Awwad'	'AP'	'2016-01-01'

Changes in claim status for each defendant occur in a known sequence, determined by law, as shown in the **ClaimStatusCodes** table:

ClaimStatusCodes		
claim_status	claim_status_desc	claim_seq
=====		
'AP'	'Awaiting review panel'	1
'OR'	'Panel opinion rendered'	2
'SF'	'Suit filed'	3
'CL'	'Closed'	4

The claim status of a defendant (with regard to a given claim) is his or her last claim status, which is the claim status with the highest claim sequence number. For certain legal reasons, legal events ordered by date do not always correspond to legal events ordered by claim sequence number.

The claim status of a claim is the claim status of the defendant having the lowest claim status of all defendants involved in the claim. This makes the claim status a minimum of the maximums. For this sample data the answer would be:

claim_id	patient_name	claim_status
=====		
1	'Bassem Dghaidi'	'OR'
2	'Omar Breidi'	'AP'
3	'Marwan Sawwan'	'AP'

The problem is the find the claim status of each claim and display it.

The output of this exercise are all the SQL queries necessary to create the database,

table, populate it with the same data and to output solution for the problem.