

Assignment Week 11

Problem 1:

You should identify insertion, update, and deletion anomalies in the sample rows of the big patient table shown in Table 1.

<u>VisitNo</u>	<u>VisitDate</u>	<u>PatNo</u>	<u>PatAge</u>	<u>PatCity</u>	<u>PatZip</u>	<u>ProvNo</u>	<u>ProvSpecialty</u>	<u>Diagnosis</u>
V10021	2/13/2015	P1	36	DENVER	80217	D1	INTERNIST	EAR INFECTION
V10021	2/13/2015	P1	36	DENVER	80217	D2	NURSE PRACTITIONER	INFLUENZA
V93030	2/20/2015	P3	17	ENGLEWOOD	80113	D2	NURSE PRACTITIONER	PREGNANCY
V82110	2/18/2015	P2	60	BOULDER	85932	D3	CARDIOLOGIST	MURMUR

Table 1.

Solution 1:

- **Insertion anomaly:**

It is necessary to know a visit and an provider because the combination of VisitNo and ProvNo is the primary key.

- **Update anomaly:**

If we change **ProvSpecialty** of ProvNo D2, two rows must be changed.

- **Deletion anomaly:**

If we delete the provider of D2 in **V10021** , we lost the information about patient **P1** and visit **V10021**