Module 11 Assignment

1.

Insert Anomaly: If a new Patient makes a visit, It is not necessary for the patient to take a Diagnosis.

Update Anomaly: If VisitNo is updated multiple rows need to be updated

Delete Anomaly: If Single row is deleted the ProvSpecialist and Diagnosis are also deleted.

2.

Step1:

PatNo🡪 PatAge, PatZip9

PatZip9🡪 PatCity

VisitNo🡪 VisitDate, PatNo

ProvNo🡪 ProvSpeciality, ProvEmail.

ProvEmail🡪 ProvNo

VisitNo, ProvNo🡪 Diagnosis

Step2: combine and create tables

Patient(PatNo, PatAge, PatZip9, Foreign Key (PatZip9) References PatientZip)

PatientZip(PatZip9, PatCity)

Visit(VisitNo, VisitDate, PatNo, Foreign Key (PatNo) Refrences Patient)

Provision(ProvNo, ProvSpeciality, ProvEmail, Unique ProvEmail)

Diagnosis(VisitNo, ProvNo, Diagnosis, Foreign Key (VisitNo) References Visit, Foreign Key (ProvNo) References Provision)

3.

The Student table is not in BCNF split the table into two tables. The second table includes the dependency StdEmail🡪 StdAddress, StdState, StdCity, StdZip.

The Institution table is not in BCNF split the table into two tables. The second table includes the dependency InstName🡪InstMascot.

4.

OrdNo🡪ItemNo ({1,2})

OrdNo🡪QtyOrd ({3,4})

OrdNo🡪CustNo (None)

OrdNo🡪CustBal (None)

OrdNo🡪CustDisc (None)

OrdNo🡪ItemPrice ({1,2})

OrdNo🡪OrdDate (None)