**Problem 2: Steps:**

1. **Group FD’s:**

PatNo PatAge, PatZip

PatZip PatCity

VisitNo VisitDate, PatNo

ProvNo ProvSpeciality, ProvEmail

VisitNo, ProvNo Diagnosis

ProvEmail ProvNo

1. **Define Tables and add PK’s and FK’s:**

Patient ( PatNo, PatAge, PatZip) FOREIGN KEY (PatZip) REFERENCES PatientZip

PatientZip ( PatZip, PatCity)

PatientVisit ( VisitNo, VisitDate, PatNo) FOREIGN KEY (PatNo) REFERENCES Patient

Provision ( ProvNo, ProvSpeciality, ProvEmail) FOREIGN KEY (ProvEmail) REFERENCES ProvisionEmail

ProvisionEmail ( ProvEmail, ProvNo)

Patient\_Diagnosis ( VisitNo, ProvNo, Diagnosis)

FOREIGN KEY (VisitNo) REFERENCES PatientVisit

FOREIGN KEY (ProvNo) REFERENCES Provision

1. **Merge Tables**

Patient ( PatNo, PatAge, PatZip) FOREIGN KEY (PatZip) REFERENCES PatientZip

PatientZip ( PatZip, PatCity)

PatientVisit ( VisitNo, VisitDate, PatNo) FOREIGN KEY (PatNo) REFERENCES Patient

Provision ( ProvNo, ProvSpeciality, ProvEmail) UNIQUE (ProvEmail)

Patient\_Diagnosis ( VisitNo, ProvNo, Diagnosis)

FOREIGN KEY (VisitNo) REFERENCES PatientVisit

FOREIGN KEY (ProvNo) REFERENCES Provision