1. Apply the simple BCNF procedure to define BCNF tables using the FD list Table 2. Show the result of each step in your analysis. For the final result, you should show the tables, columns, primary key of each table, foreign keys, and unique constraints. You do not need to provide CREATE TABLE statements.

Table 2: FDs for the Big Patient Table

|  |
| --- |
| PatNo → PatAge |
| PatZip9 → PatCity |
| VisitNo → VisitDate  PatNo → PatZip9  ProvNo → ProvSpecialty |
| VisitNo → PatNo |
| VisitNo, ProvNo → Diagnosis  ProvNo → ProvEmail  ProvEmail → ProvNo |

**List of FD’s:**

PatNo 🡪 PatAge,PatZip9

PatZip9 → PatCity

VisitNo → VisitDate, PatNo

ProvNo → ProvSpecialty, ProvEmail

VisitNo, ProvNo → Diagnosis

**List of Tables:**

**Partition Table 1**(PatNo, PatAge, PatZip9)

FOREIGN KEY (PatZip9) REFERENCES Partition Table 2

**Partition Table 2** (PatZip9, PatCity)

**Partition Table 3** (VisitNo, VisitDate, PatNo)

FOREIGN KEY (PatNo) REFERENCES Partition Table 1

**Partition Table 4** (ProvNo, ProvSpecialty, ProvEmail)

UNIQUE (ProvEmail)

**Partition Table 5** (VisitNo, ProvNo ,Diagnosis)

FOREIGN KEY (PatNo) REFERENCES Partition Table 1

FOREIGN KEY (VisitNo) REFERENCES Partition Table 3