**Normalisation**

**patient=patient id,pat name,pat address, Medical history,patient type**

**Resident=Rpatient id**

**Nonresident=Npatientid**

**Bed=Bed id**

**Appointment=Appointment id,Appointment date,doctor id,patient id**

**Doctor=Doc id,Doc name,Doc exp,Doc contract**

**Prescription =pres id ,pres date,appointment id,Medicine,advice**

**Nurse=Nurse id,Nurse Name**

**Diagnosis Report=Diag id,Diag date ,Pat id**

| **Patient(a)** | **Patient\_id** | **a1** |
| --- | --- | --- |
| **Pat\_name** | **a2** |
| **Pat\_address** | **a3** |
| **Medical History** | **a4** |
| **Patient type** | **a5** |
| **Appointment (b)** | **Appointment\_id** | **b1** |
| **Appointment\_Date** | **b2** |
| **Doc\_id** | **c1** |
| **Patient\_id** | **a1** |
| **Doctor(c)** | **Doc\_ID** | **c1** |
| **Doc\_name** | **c2** |
| **Doc\_exp** | **c3** |
| **Doc-Contract** | **c4** |
| **Prescription(d)** | **Pres\_ID** | **d1** |
| **Pres\_Date** | **d2** |
| **Appointment\_id** | **b1** |
| **Medicine** | **d3** |
| **Advice** | **d4** |
| **Nurse(e)** | **Nurse\_ID** | **e1** |
| **Nurse\_Name** | **e2** |
| **Diagnosis Report(f)** | **Diag\_ID** | **f1** |
| **Diag\_Date** | **f2** |
| **pat\_ID** | **a1** |
| **Resident** | **Rpatient\_id** | **a1** |
| **Nonresident** | **Nonresident\_id** | **a1** |

| **a1** | **a2,a3,a4,a5** |
| --- | --- |
| **b1** | **b2,c1,a1** |
| **c1** | **c2,c3,c4** |
| **d1** | **d2,d3,d4,b1** |
| **e1** | **e2** |
| **f1** | **f2** |

**1NF:**

| **a1** | **b1** | **c1** | **d1** | **e1** | **f1** | **a2** | **a3** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **a4** | **a5** | **b2** | **c2** | **c3** | **c4** | **d2** | **d3** |
| **e2** | **f2** |  |  |  |  |  |  |

**2NF:Here, all non-key attributes are dependent on the primary key.**

**R10:**

| **a1** | **a2** | **a3** | **a4** | **a5** |
| --- | --- | --- | --- | --- |

**R11:**

| **b1** | **b2** |
| --- | --- |

**R12 :**

| **c1** | **c2** | **c3** | **c4** |
| --- | --- | --- | --- |

**R13:**

| **d1** | **d2** | **d3** | **d4** |
| --- | --- | --- | --- |

**R14:**

| **e1** | **e2** |
| --- | --- |

**R15:**

| **f1** | **f2** |
| --- | --- |

**3NF:**

**R10,R11,R12,R13 ,R14 and R15 already in 3nf**

**BCNF:**

**All relations already in BCNF**