**Question 1**

**Bed**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column\_Name | BedNum | Available | RoomID | BedTypeID |
| Key\_Type | PK |  | FK1 | FK2 |
| Nulls/Unique |  | NN |  |  |
| FK table |  |  | Room | Bed\_Type |
| FK column |  |  | RoomID | BedTypeID |
| Datatype | Char | Char | Numeric | Numeric |
| Max Length | 4 | 1 | 4 | 4 |
| Validate |  | {Y,N} |  |  |

**Bed**

Insert into Bed values

( ‘B001’,'Y',RP01,’BT01’)

Insert into Bed values

( ‘B077,’'N',RL01,’BT77’)

Insert into Bed values

( ‘B092’,'N',RIC7,’BT92’)

**Patient**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Column\_Name | PatientID | LastName | FirstName | MiddleName | Address | DOB | PhoneNum | SSN | BebNum |
| Key\_Type | PK |  |  |  |  |  |  |  | FK |
| Nulls/Unique |  | NN | NN |  | NN | NN | NN | U |  |
| FK table |  |  |  |  |  |  |  |  | Bed |
| FK column |  |  |  |  |  |  |  |  | BedID |
| Datatype | Char | VarChar2 | Varchar2 | Varchar2 | Varchar2 | Date | Varchar2 | Varchar2 | Char |
| Max Length | 6 | 20 | 20 | 20 | 20 | 20 | 15 | 9 | 4 |
| Validate |  |  |  |  |  | <= SYSDATE |  |  |  |

**Patient**

insert into Patient values

('PM0001','Gresham','Jonathon','Taves','45 Pond rd',TO\_DATE('17-JUN-1987', 'dd-MON-yyyy'),'289-125-2341','234123421','B001');

insert into Patient values

('PM0002','Travis','Scott','Kirk','455 Highland Dr',TO\_DATE('24-DEC-1956', 'dd-MON-yyyy'),'416-234-4567','123444555','B077');

insert into Patient values

('PF0003','Harding','Tonya',null,'111 Trey Dr',TO\_DATE('02-SEP-1998', 'dd-MON-yyyy'),'647-555-5555','333444555','B092');

**Note**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column\_Name | PatientID | NoteDate | Comments | StaffID |
| Key\_Type | PK, FK1 | PK |  | FK2 |
| Nulls/Unique |  |  | NN |  |
| FK table | Patient |  |  | Staff |
| FK column | PatientID |  |  | StaffID |
| Datatype | Numeric | Date | Varchar2 | Char |
| Max Length | 6 | 20 | 4000 | 6 |
| Validate |  | <= SYSDATE |  |  |

**Note**

Insert into Note values

('PM0001','11-Nov-15','Patient is admitted into hospital, broken leg sent for x-rays','SN0001');

Insert into Note values

('PM0002','15-Mar-16','Patient admitted to hospital with severe trauma to the head','SRN002');

Insert into Note values

('PF0003','11-Jan-16','Patient is admitted to hospital, brought by ambulance, unconcious and non responsive','SD0003');

**STAFF**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Column\_Name | StaffID | LastName | FirstName | MiddleName | JobTitle | WorkPhone | Extension | SSN | HireDate | Salary | WageRate | LicenseNumeric | WardID |
| Key\_Type | PK |  |  |  |  |  |  |  |  |  |  |  | FK |
| Nulls/Unique |  | NN | NN |  | NN | NN | NN | U | NN |  |  |  |  |
| FK table |  |  |  |  |  |  |  |  |  |  |  |  | Ward |
| FK column |  |  |  |  |  |  |  |  |  |  |  |  | WardID |
| Datatype | Char | Varchar2 | Varchar2 | Varchar2 | Varchar2 | Varchar2 | Varchar2 | Varchar2 | Date | Numeric | Numeric | Numeric | Char |
| Max Length | 6 | 20 | 20 | 20 | 40 | 10 | 4 | 9 | 20 | 8,2 | 5,2 | 8 | 4 |
| Validate |  |  |  |  |  |  |  |  | <=SYSDATE | >=0 | >=0 |  |  |

**Staff**

Insert into Staff values

('SN0001','Gripel','Wendy','Chofsta','Nurse Practitioner','416-234-3344','2351','345666732',TO\_DATE('07-FEB-1995', 'dd-MON-yyyy'), NULL, 30, 2345634,'GW01');

Insert into Staff values

('SRN002','Thomas','Henry','Tobias','Registered Nurse Practitioner','416-234-3345','2341','342112345',TO\_DATE('28-JUL-2001', 'dd-MON-yyyy'), 85000, null, 1345623,'ICW3');

Insert into Staff values

('SD0003','Wykoviec','Felicia',null,'General Doctor Practitioner','416-234-5533','3344','576643322',TO\_DATE('05-JAN-1988', 'dd-MON-yyyy'), 100000, null, 4533214,'GW01');

**MEDICINE**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Column\_Name | MedicineID | ScientName | CommonName | Normaldose | MedComment | QuantOnStock | UnitMeasure |
| Key\_Type | PK |  |  |  |  |  |  |
| Nulls/Unique |  | U | NN | NN |  | NN | NN |
| FK table |  |  |  |  |  |  |  |
| FK column |  |  |  |  |  |  |  |
| Datatype | Char | Varchar2 | Varchar2 | Varchar2 | Varchar2 | Numeric | Varchar2 |
| Max Length | 6 | 20 | 20 | 20 | 500 | 5 | 3 |
| Validate |  |  |  |  |  | >=0 |  |

**Medicine**

Insert into Medicine values

('MAB001','Acetlsalicylic Acid','Aspirin','500mg','Do not consume with alcohol',643,'mg');

Insert into Medicine values

('MAB002','Acetaminophen','Tylenol','250mg','Do not overexceed 4 pills a day',435,'mg');

Insert into Medicine values

('MAB003','3-Methylporphine','Codeine','50mg','Do not exceed 3 pills a day',1450,'mg');

**Perscription**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Column\_Name | PrescriptID | PrescripDate | Dosage | Instruction | PatientID | MedicineID | StaffID |
| Key\_Type | PK |  |  |  | FK1 | FK2 | FK3 |
| Nulls/Unique |  | NN | NN | NN |  |  |  |
| FK table |  |  |  |  | Patient | Medicine | Staff |
| FK column |  |  |  |  | PatientID | MedicineID | StaffID |
| Datatype | Char | Date | Varchar2 | Varchar2 | Char | Char | Char |
| Max Length | 6 | 20 | 10 | 500 | 6 | 6 | 6 |
| Validate |  | <=SYSDATE |  |  |  |  |  |

**Prescription**

Insert into Prescription values

('PIP001',TO\_DATE('23-Mar-16', 'dd-MON-yy'),'2G','Take tablet twice a day','PM0001','MAB001','SD0001');

Insert into Prescription values

('PIP002',TO\_DATE('26-Mar-16', 'dd-MON-yy'),'500MG','Take tablet twice daily until finished','PM0001','MAB002','SD0001');

Insert into Prescription values

('PIP003',TO\_DATE('02-Apr-16','dd-MON-yy'),'5G','Take 4 times daily until finished','PM0002','MAB003','SD0001');

**SERVICE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Column\_Name | ServiceID | ServiceDescrip | Charge | ServiceComment | CategCode |
| Key\_Type | PK |  |  |  | FK |
| Nulls/Unique |  | U | NN |  |  |
| FK table |  |  |  |  | Service\_cat |
| FK column |  |  |  |  | CategCode |
| Datatype | Char | Varchar2 | Numeric | Varchar2 | Char |
| Max Length | 6 | 100 | 6,2 | 500 | 6 |
| Validate |  |  | >=0 |  |  |

**Service**

Insert into Service values

('SV0100','General Admission',75.00,'For Patients who are admitted for general needs. usually they will leave within 24 hours. nothing major','CC0001');

Insert into Service values

('SV0200','Patient Requires Surgery. will be operated on',5000.00,'A Patient is admitted and requires surgery, after the surgery the patient will need to remain in the hospital for a few days up to a week to recover','CCS002');

Insert into Service values

('SV0300','Patient is in Critical Condition',1500.00,'Patient arrives/develops a critical condition, patient will be placed in an ICU. consistently monitored,time of stay:unknown', 'CCIC03');

**Treatment**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Column\_Name | **TreatID** | **TreatDate** | **ActualCharge** | **TreatComment** | **PatientID** | **StaffID** | **ServiceID** |
| Key\_Type | **PK** |  |  |  | **FK1** | **FK2** | **FK3** |
| Nulls/Unique |  | **NN** | **NN** |  |  |  |  |
| FK table |  |  |  |  | **Patient** | **Staff** | **Service** |
| FK column |  |  |  |  | **PatientID** | **StaffID** | **ServiceID** |
| Datatype | **Char** | **Date** | **Numeric** | **Varchar2** | **Char** | **Char** | **Char** |
| Max Length | **6** | **20** | **8,2** | **100** | **6** | **6** | **6** |
| Validate |  | **<=SYSDATE** | **>=0** |  |  |  |  |

**Treatment**

('IPT001',TO\_DATE('18-MAR-2016', 'dd-MON-yyyy'),250,'Patient Received General Check up and X rays','PM0001','SN0001','SV010');

Insert into Treatment values

('IPT002',TO\_DATE('02-APR-2016', 'dd-MON-yyyy'),5500,'Patient underwent surgery for wound','PM0002','SRN002','SV0200');

Insert into Treatment values

('IPT003',TO\_DATE('02-NOV-2015', 'dd-MON-yyyy'), 24543,'Patient Remained in ICU for several months due to critical condition','PF0003','SD0003','SV0300');

**Question 5 complex view**

CREATE VIEW patient\_vu

AS

SELECT Patient.FirstName PFirst, Patient.MiddleName PMiddle, Patient.LastName PLast,

Treatment.TreatDate TreatDate, Treatment.ActualCharge TreatCharge,

Service.ServiceID ServiceDesc, Staff.FirstName SFirst, Staff.MiddleName SMiddle, Staff.LastName SLast, Staff.JobTitle SJobTitle,

Ward.Ward\_name Ward\_name

FROM Patient

JOIN Treatment

ON Treatment.PatientID = Patient.PatientID

JOIN Service

ON Service.ServiceID = Treatment.ServiceID

JOIN Staff

ON Staff.StaffID = Treatment.StaffID

JOIN Ward

ON Ward.WardID = Staff.WardID;

**Question 6**

SELECT SLast AS "Last Name", SFirst AS "First Name", SJobTitle job, Ward\_Name Ward, TO\_CHAR(TreatCharge, '$999999.99') Charge

FROM patient\_vu

WHERE ServiceDesc = 'SV0100';

**Question 7**

Oracle Account to view all tables: DBS301\_161B01/cbWZ6472@neptune