```sql
select * from patient;

select * from ahp;

select * from hcw;

select * from doctor;

select * from lab_tech;

select * from nurse;

select * from diagnosis_codes;

select * from test_codes;

select * from procedure_codes;

select * from med_codes;

select * from anti_cancer_drugs;

select * from pt_procedure;

select * from pt_admission;

select * from pt_test;

select * from other_meds;

select * from pain_meds;

select * from pt_meds;

select * from vaccines;

select * from infection_meds;

select * from pt_diagnosis;


-- admission summary of 1 Ray Holt
INSERT INTO pt_admission (ADMISSION_ID,
PATIENT_ID,ADMITTING_HCW_ID,ADMISSION_DATE,DISCHARGE_DATE,
STAY_DURATION,ROOM_NUM,BILL_AMOUNT)
VALUES (admission_seq.nextval,
(SELECT patient.patient_id FROM patient WHERE patient.pt_last_name = 'Holt'),
1, TO_DATE ('01/20/2021' , 'mm/dd/yyyy'),
TO_DATE ('01/28/2021' , 'mm/dd/yyyy'), 8, 1104, 15238.23);


Insert into pt_diagnosis (PT_DIAGNOSIS_ID,ADMISSION_ID,
```

```sql
DIAGNOSIS_ID,DIAGNOSING_DR_ID,DIAGNOSIS_NOTES)

VALUES (pt_diagnosis_seq.nextval,

admission_seq.currval,5,1,'Admit for chemotherapy' );


INSERT INTO pt_test (PT_TEST_ID, ADMISSION_ID,

TEST_ID, TEST_DATE, TEST_RESULT_DATE, TEST_RESULT_SUMMARY)

VALUES (pt_test_seq.nextval, admission_seq.currval, 9,

TO_DATE ('01/20/2021' , 'mm/dd/yyyy'), TO_DATE ('01/22/2021' , 'mm/dd/yyyy'),

'Pancreatic growth, advise biopsy');


INSERT INTO pt_meds (PT_MED_ID, ADMISSION_ID, MED_ID, DOSAGE,

FREQUENCY, INSTRUCTIONS, PRECAUTIONS)

VALUES (pt_med_seq.nextval, admission_seq.currval, 8, '1gm/m2',

'Once weekly for 4 weeks', 'CBC monitoring', NULL);


INSERT INTO pt_procedure (PT_PROCEDURE_ID, ADMISSION_ID,

PROCEDURE_ID, PROCEDURE_DATE, PROCEDURE_RESULT_DATE, PROCEDURE_SUMMARY)

VALUES (pt_procedure_seq.nextval, admission_seq.currval, 3,

TO_DATE ('01/20/2021' , 'mm/dd/yyyy'), TO_DATE ('01/21/2021' , 'mm/dd/yyyy'),

'Advise MRI');


-- admission summary of Amy Fowler
INSERT INTO pt_admission (ADMISSION_ID,

PATIENT_ID,ADMITTING_HCW_ID,ADMISSION_DATE,DISCHARGE_DATE,

STAY_DURATION,ROOM_NUM,BILL_AMOUNT)


VALUES (admission_seq.nextval,

(SELECT patient.patient_id FROM patient WHERE patient.pt_phone = '111112222'), 1,

TO_DATE ('03/16/2022' , 'mm/dd/yyyy'), TO_DATE ('03/19/2022' , 'mm/dd/yyyy'),

3, 301, 3248.52);
```

```sql
Insert into pt_diagnosis (PT_DIAGNOSIS_ID,ADMISSION_ID,
DIAGNOSIS_ID,DIAGNOSING_DR_ID,DIAGNOSIS_NOTES)
VALUES (pt_diagnosis_seq.nextval,
admission_seq.currval,4,1,'Stomach infection' );


INSERT INTO pt_test (PT_TEST_ID, ADMISSION_ID,
TEST_ID, TEST_DATE, TEST_RESULT_DATE, TEST_RESULT_SUMMARY)
VALUES (pt_test_seq.nextval, admission_seq.currval, 3,
TO_DATE ('03/16/2022' , 'mm/dd/yyyy'), TO_DATE ('03/17/2022' , 'mm/dd/yyyy'),
'WBC count high, infection likely');


INSERT INTO pt_meds (PT_MED_ID, ADMISSION_ID, MED_ID, DOSAGE,
FREQUENCY, INSTRUCTIONS, PRECAUTIONS)
VALUES (pt_med_seq.nextval, admission_seq.currval, 5, '500mg',
'Twice a day for 3 days',NULL, NULL);


INSERT INTO pt_meds (PT_MED_ID, ADMISSION_ID, MED_ID, DOSAGE,
FREQUENCY, INSTRUCTIONS, PRECAUTIONS)
VALUES (pt_med_seq.nextval, admission_seq.currval, 9, '150mg',
'Once a day for 3 days', 'Take before breakfast', NULL);


INSERT INTO pt_procedure (PT_PROCEDURE_ID, ADMISSION_ID,
PROCEDURE_ID, PROCEDURE_DATE, PROCEDURE_RESULT_DATE, PROCEDURE_SUMMARY)
VALUES (pt_procedure_seq.nextval, admission_seq.currval, 3,
TO_DATE ('03/16/2022' , 'mm/dd/yyyy'), TO_DATE ('03/18/2022' , 'mm/dd/yyyy'),
'No relevant findings');


-- admission summary 2 of Ray Holt


INSERT INTO pt_admission (ADMISSION_ID,
PATIENT_ID,ADMITTING_HCW_ID,ADMISSION_DATE,DISCHARGE_DATE,
```

```sql
STAY_DURATION,ROOM_NUM,BILL_AMOUNT)

VALUES (admission_seq.nextval,

(SELECT patient.patient_id FROM patient WHERE patient.pt_phone = 1234567890),

1, TO_DATE ('08/26/2021' , 'mm/dd/yyyy'),

TO_DATE ('09/02/2021' , 'mm/dd/yyyy'), 6, 1003, 7836.15);


Insert into pt_diagnosis (PT_DIAGNOSIS_ID,ADMISSION_ID,

DIAGNOSIS_ID,DIAGNOSING_DR_ID,DIAGNOSIS_NOTES)

VALUES (pt_diagnosis_seq.nextval,

admission_seq.currval,5,1,'Admit for chemotherapy' );


INSERT INTO pt_test (PT_TEST_ID, ADMISSION_ID,

TEST_ID, TEST_DATE, TEST_RESULT_DATE, TEST_RESULT_SUMMARY)

VALUES (pt_test_seq.nextval, admission_seq.currval, 9,

TO_DATE ('08/26/2021' , 'mm/dd/yyyy'), TO_DATE ('08/28/2021' , 'mm/dd/yyyy'),

'Pancreatic growth');


INSERT INTO pt_meds (PT_MED_ID, ADMISSION_ID, MED_ID, DOSAGE,

FREQUENCY, INSTRUCTIONS, PRECAUTIONS)

VALUES (pt_med_seq.nextval, admission_seq.currval, 8, '1gm/m2',

'Once weekly for 4 weeks', 'CBC monitoring', NULL);


INSERT INTO pt_procedure (PT_PROCEDURE_ID, ADMISSION_ID,

PROCEDURE_ID, PROCEDURE_DATE, PROCEDURE_RESULT_DATE, PROCEDURE_SUMMARY)

VALUES (pt_procedure_seq.nextval, admission_seq.currval, 3,

TO_DATE ('08/27/2021' , 'mm/dd/yyyy'), TO_DATE ('08/28/2021' , 'mm/dd/yyyy'),

'Blockage significantly reduced');


--First query : Admission summary of Amy's admission from her phone number
-- Joins six tables
```

```sql
SELECT CAST (stay_duration || ' days' AS VARCHAR (8)),

test_result_summary, diagnosis_description,

drug_name, dosage, frequency

FROM pt_admission JOIN patient ON patient.patient_ID = pt_admission.patient_ID

JOIN pt_test ON pt_admission.admission_ID = pt_test.admission_id

JOIN pt_diagnosis ON  pt_admission.admission_ID = pt_diagnosis.admission_id

JOIN diagnosis_codes ON diagnosis_codes.diagnosis_id = pt_diagnosis.diagnosis_id

JOIN pt_meds ON pt_admission.admission_ID = pt_meds.admission_id

JOIN med_codes ON med_codes.med_id = pt_meds.med_id


WHERE pt_phone = 111112222 ;
```

-- Second query : Retrieve details of HCW by their departments

```sql
Select COUNT (HCW_ID), hcw.hcw_department from HCW

Group by hcw.hcw_department;
```

```sql
SELECT hcw_first_name, hcw_last_name, hcw_phone, AHP_license_cert, ahp_title

FROM HCW JOIN AHP ON AHP.hcw_id = hcw.hcw_id

WHERE hcw.hcw_department = 'Surgery';
```

```sql
SELECT hcw_first_name, hcw_last_name, hcw_phone FROM HCW

WHERE hcw.hcw_department = 'Medicine';
```

--Third query – 'admission_details' view for admission events summary

--Third query – 'admission_details' view for admission events summary

```sql
CREATE OR REPLACE VIEW admission_details AS

SELECT  pt_admission.admission_id, pt_first_name, pt_last_name,

pt_address, room_num, admission_date,

CAST (pt_admission.stay_duration || ' days' AS VARCHAR(8))
```

```sql
AS Stay_duration, diagnosis_description,

drug_name, dosage, frequency, TO_CHAR (bill_amount , '$99999.99')AS Final_amt


FROM pt_admission JOIN patient ON patient.patient_ID = pt_admission.patient_ID

JOIN pt_test ON pt_admission.admission_ID = pt_test.admission_id

JOIN pt_diagnosis ON  pt_admission.admission_ID = pt_diagnosis.admission_id

JOIN diagnosis_codes ON diagnosis_codes.diagnosis_id = pt_diagnosis.diagnosis_id

JOIN pt_meds ON pt_admission.admission_ID = pt_meds.admission_id

JOIN med_codes ON med_codes.med_id = pt_meds.med_id;

select * from admission_details;


select * from admission_details

WHERE admission_date = TO_DATE ('08/26/2021' , 'mm/dd/yyyy');


--Index Creation


CREATE UNIQUE INDEX PtPhoneIDX

ON Patient (pt_phone);


CREATE UNIQUE INDEX HCWPhoneIDX

ON HCW (hcw_phone);


CREATE INDEX RoomNumIDX

ON Pt_admission (Room_num);


CREATE INDEX DateAdmitIDX

ON Pt_admission (admission_date);


CREATE INDEX DateDischargeIDX

ON Pt_admission (discharge_date);
```

```
CREATE INDEX HCWDeptIDX

ON HCW (hcw_department);
```