

```
create table pregnancy_diagnosis
(
    codes varchar(255)
);
```

```
create table encounter_table
(
    enc_id int,
    enc_patient_id int,
    visit_prov_id int,
    enc_status varchar(255),
    enc_date date,
    due_date date
);
```

```
create table encounter_dx_table
(
    dx_enc_id int,
    dx_line int,
    dx_icd varchar(255)
);
```

```
create table location_table
(
    loc_id int,
    loc_name varchar(255),
    loc_sa varchar(255)
);
```

```
create table patient_table
(
```

```
        unique_patient_id int,  
gender varchar(255),  
birth_date date,  
pat_loc_id int,  
pat_pcp_id int  
);
```

```
create table pcp_table  
(  
        unique_patient_id int,  
        pcp_prov_id int  
);
```

```
create table provider_table  
(  
        prov_id int,  
        prov_name varchar(255),  
        prov_loc_id int,  
        prov_spec varchar(255)  
);
```

```
SET GLOBAL local_infile=1;
```

```
-- Importing csv files into MySQL Workbench
```

```
LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due  
October 2 at 11_520230927011310\\Pregnancy Assessment\\Pregnancy_Diagnosis.csv'
```

```
INTO TABLE pregnancy_diagnosis
```

```
FIELDS TERMINATED BY ','
```

```
IGNORE 1 LINES;
```

```
LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due  
October 2 at 11_520230927011310\\Pregnancy Assessment\\Encounter_Table.csv'
```

INTO TABLE encounter_table

FIELDS TERMINATED BY ','

IGNORE 1 LINES;

LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due October 2 at 11_520230927011310\\Pregnancy Assessment\\Encounter_dx_Table.csv'

INTO TABLE encounter_dx_table

FIELDS TERMINATED BY ','

IGNORE 1 LINES;

LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due October 2 at 11_520230927011310\\Pregnancy Assessment\\Location_Table.csv'

INTO TABLE location_table

FIELDS TERMINATED BY ','

IGNORE 1 LINES;

LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due October 2 at 11_520230927011310\\Pregnancy Assessment\\Patient_Table.csv'

INTO TABLE patient_table

FIELDS TERMINATED BY ','

IGNORE 1 LINES;

LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due October 2 at 11_520230927011310\\Pregnancy Assessment\\PCP_Table.csv'

INTO TABLE pcp_table

FIELDS TERMINATED BY ','

IGNORE 1 LINES;

LOAD DATA LOCAL INFILE 'C:\\Users\\Neel\\Downloads\\MAPMGTechnical Assessment - Due October 2 at 11_520230927011310\\Pregnancy Assessment\\Provider_Table.csv'

INTO TABLE provider_table

FIELDS TERMINATED BY ','

IGNORE 1 LINES;

```
show tables;
```

```
-- female patients with age greater than 17
```

```
drop table kp_patient_encounter;
```

```
create table kp_patient_encounter as
```

```
select a.unique_patient_id, a.gender, a.birth_date
```

```
      , b.enc_id, b.visit_prov_id, b.enc_status, b.enc_date, b.due_date
```

```
      , TIMESTAMPDIFF(YEAR, a.birth_date, b.enc_date) as age
```

```
from patient_table a
```

```
left join encounter_table b
```

```
      on a.unique_patient_id = b.enc_patient_id
```

```
where gender = 'F' and TIMESTAMPDIFF(YEAR, a.birth_date, b.enc_date) > 17
```

```
order by a.unique_patient_id, b.enc_date
```

```
;
```

```
-- visiting provider specialty = OBGYN
```

```
drop table kp_pat_prov_enc;
```

```
create table kp_pat_prov_enc as
```

```
select a.*, b.prov_name, b.prov_spec
```

```
from kp_patient_encounter as a
```

```
left join provider_table as b
```

```
      on a.visit_prov_id = b.prov_id
```

```
where upper(prov_spec) = 'OBGYN'
```

```
order by a.unique_patient_id, a.enc_date
```

```
;
```

```
-- encounters with pregnancy codes
```

```
drop table kp_preg_enc;
```

```
create table kp_preg_enc as
select distinct a.dx_enc_id, b.codes as preg_code
from encounter_dx_table as a
left join pregnancy_diagnosis as b
      on a.dx_icd = b.codes
where b.codes is not null
order by a.dx_enc_id
;
```

```
-- encounters with either due date populated or pregnancy diagnosis
drop table kp_preg_pat_prov_enc;
```

```
create table kp_preg_pat_prov_enc as
select a.*, b.preg_code
from kp_pat_prov_enc as a
left join kp_preg_enc as b
      on a.enc_id = b.dx_enc_id
where (a.due_date <> '0000-00-00' and a.due_date > a.enc_date)
      or b.preg_code is not null
;
```

```
-- identify multiple encounters
drop table denominator;
```

```
create table denominator as
select a.*, TIMESTAMPDIFF(WEEK, a.enc_date, a.due_date) as weeks_due
      , rank() over (partition by a.unique_patient_id order by a.enc_date, a.enc_id) as seq
from kp_preg_pat_prov_enc a
order by a.unique_patient_id, a.enc_date
;
```

-- get only 1st encounter from multiple encounters

drop table final_denominator;

create table final_denominator as

select unique_patient_id, gender, age,

visit_prov_id, prov_spec,

enc_id, enc_status, enc_date, due_date, weeks_due, preg_code, 1 as denominator

from denominator

where seq = 1

;

-- denominator count

select count(unique_patient_id)

from final_denominator

;

/*Numerator calculation begins*/

-- The number of patients with a completed visit to the OBGYN between 40 and 27 weeks prior to delivery.

drop table kp_numerator_1;

create table kp_numerator_1 as

select a.*

, case when (a.enc_status = 'Completed' or a.enc_status = 'Compeleted') and
a.weeks_due >= 27 and a.weeks_due <= 40 then 1 else 0 end as due_date_numerator

from denominator a

order by a.unique_patient_id, a.enc_id, a.visit_prov_id

;

-- Pregnant member identified solely by diagnoses should have an encounter within 6 weeks of diagnosis

drop table kp_numerator_2;

create table kp_numerator_2 as

select a.*

 , b.enc_date as next_enc_date

 , TIMESTAMPDIFF(WEEK, b.enc_date, a.enc_date) as preg_follow_up_weeks

 , case when b.preg_code is not null and TIMESTAMPDIFF(WEEK, b.enc_date, a.enc_date) <= 6 then 1 else 0 end as preg_follow_up_numerator

from denominator a

left join denominator b

 on a.unique_patient_id = b.unique_patient_id

 and b.seq = a.seq - 1

order by a.unique_patient_id, a.enc_date

;

-- combining to get numerator

drop table final_numerator;

create table final_numerator as

select a.unique_patient_id, a.gender, a.age, a.visit_prov_id, a.prov_spec

 , a.enc_id, a.enc_status, a.enc_date, a.due_date, a.weeks_due, a.due_date_numerator

 , a.preg_code, b.preg_follow_up_weeks, b.preg_follow_up_numerator, case when a.due_date_numerator = 1 or b.preg_follow_up_numerator = 1 then 1 else 0 end as numerator

from kp_numerator_1 a

left join kp_numerator_2 b

 on a.unique_patient_id = b.unique_patient_id

 and a.enc_id = b.enc_id

where a.seq = 1

```
order by a.unique_patient_id, a.enc_date
```

```
;
```

```
/******
```

```
-- final table with denom and num
```

```
drop table kp_preganancy_case_study;
```

```
create table kp_preganancy_case_study as
```

```
select a.*, b.numerator
```

```
from final_denominator a
```

```
left join final_numerator b
```

```
    on a.unique_patient_id = b.unique_patient_id
```

```
    and a.enc_id = b.enc_id
```

```
;
```

```
select *
```

```
from kp_preganancy_case_study
```

```
;
```

```
-- Percentage
```

```
drop table preg_percentage;
```

```
create table preg_percentage as
```

```
select sum(numerator) as num, sum(denominator) as denom,
```

```
round((sum(numerator)/sum(denominator))*100,2) as rate
```

```
from kp_preganancy_case_study
```

```
;
```

```
select *
```

```
from preg_percentage
```


