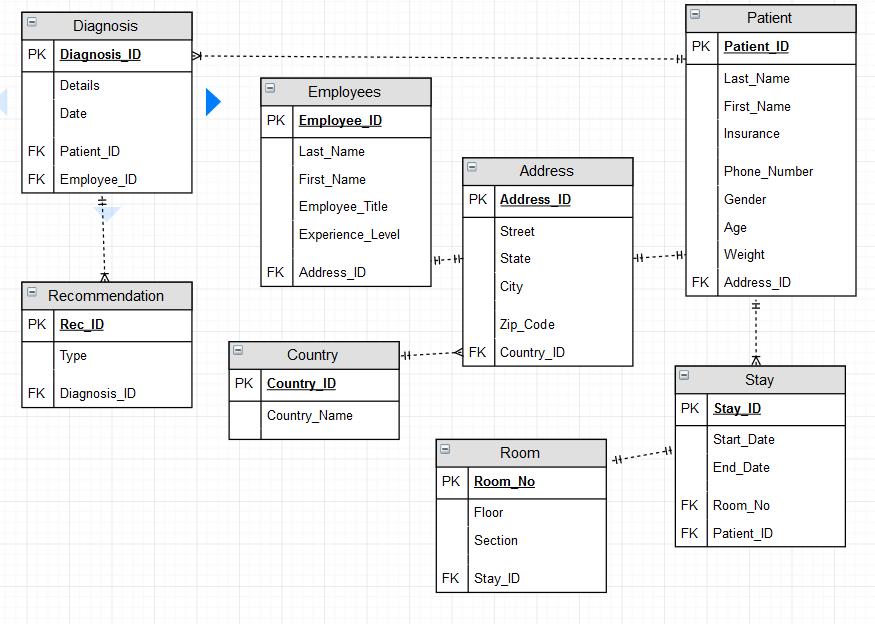
**ERD**



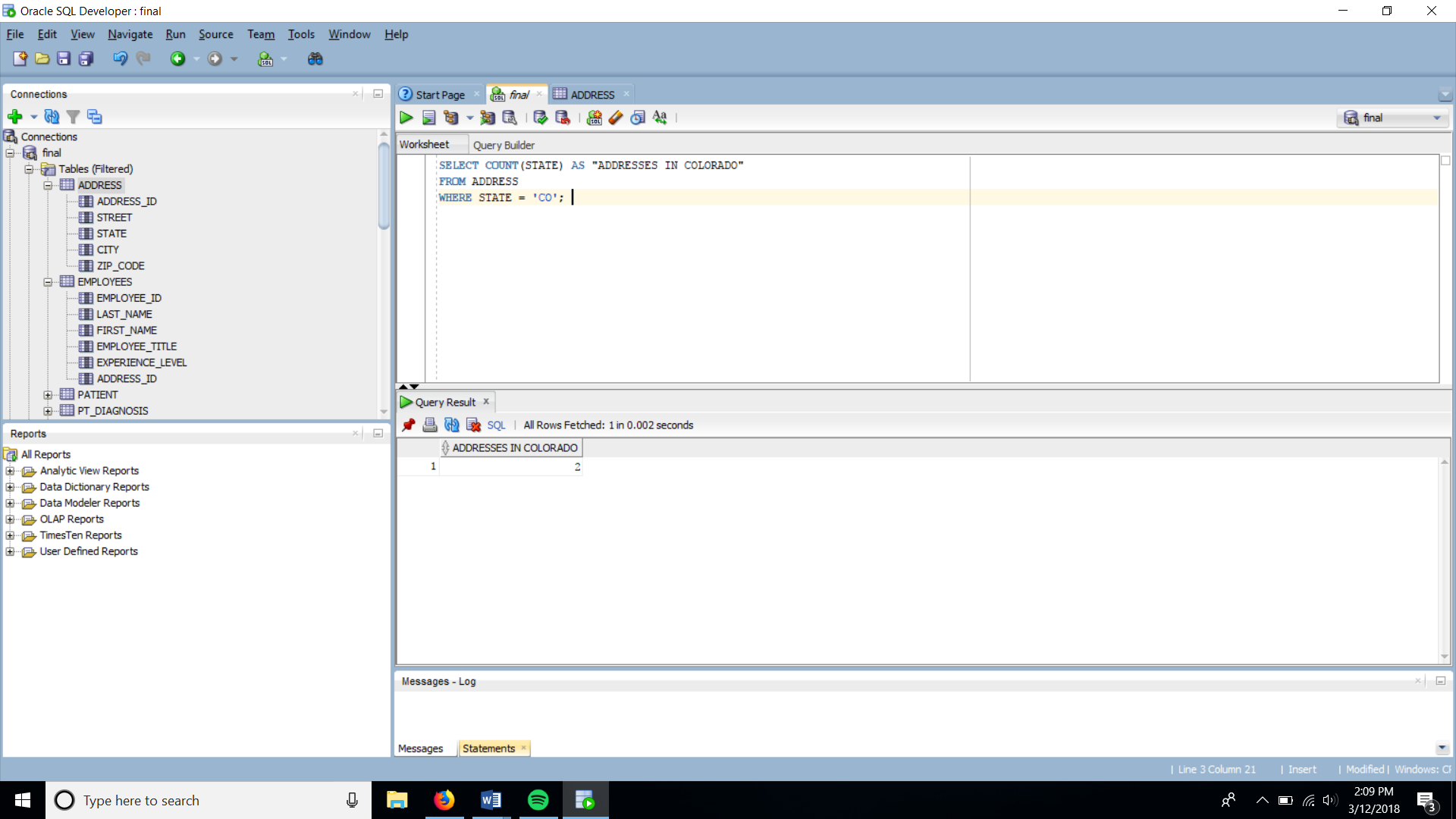
**SQL Reports**

**Aggregate function #1**

SELECT COUNT(STATE) AS "ADDRESSES IN COLORADO"

FROM ADDRESS

WHERE STATE = 'CO';



**Aggregate function #2**

SELECT COUNT(P.LAST\_NAME)

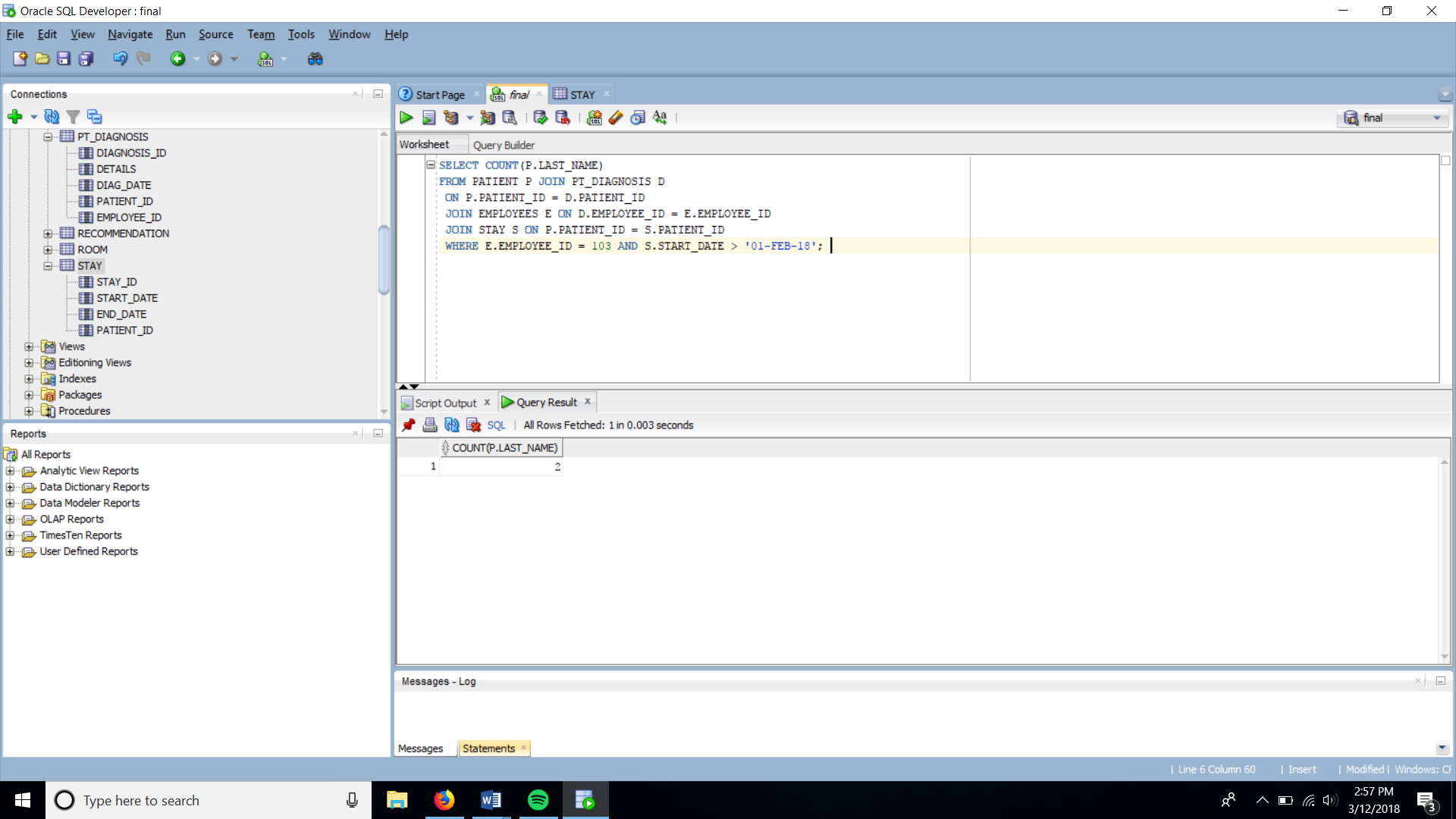
FROM PATIENT P JOIN PT\_DIAGNOSIS D

ON P.PATIENT\_ID = D.PATIENT\_ID

JOIN EMPLOYEES E ON D.EMPLOYEE\_ID = E.EMPLOYEE\_ID

JOIN STAY S ON P.PATIENT\_ID = S.PATIENT\_ID

WHERE E.EMPLOYEE\_ID = 103 AND S.START\_DATE > '01-FEB-18';

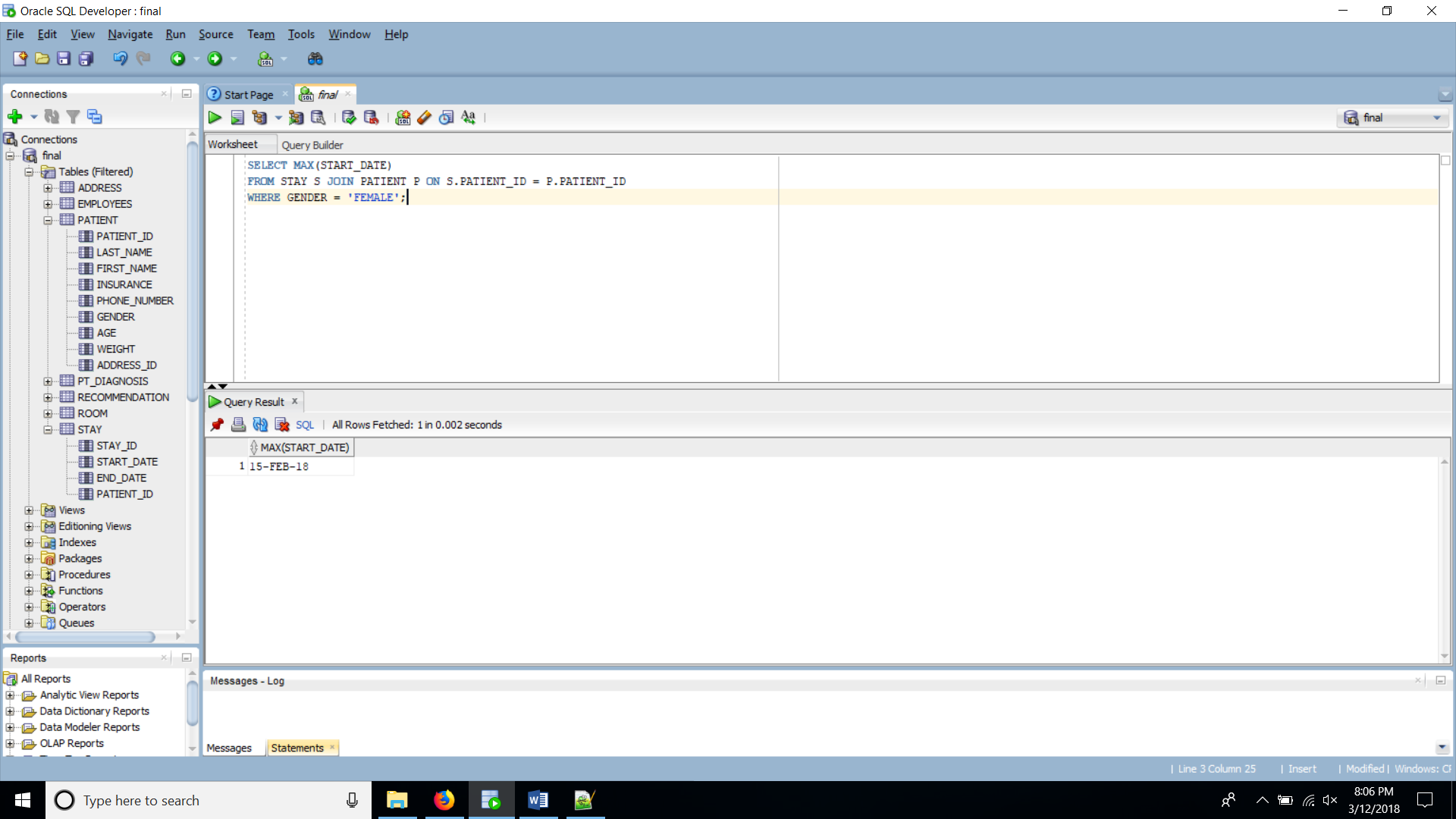


**Aggregate function #3**

SELECT MAX(START\_DATE)

FROM STAY S JOIN PATIENT P ON S.PATIENT\_ID = P.PATIENT\_ID

WHERE GENDER = 'FEMALE';

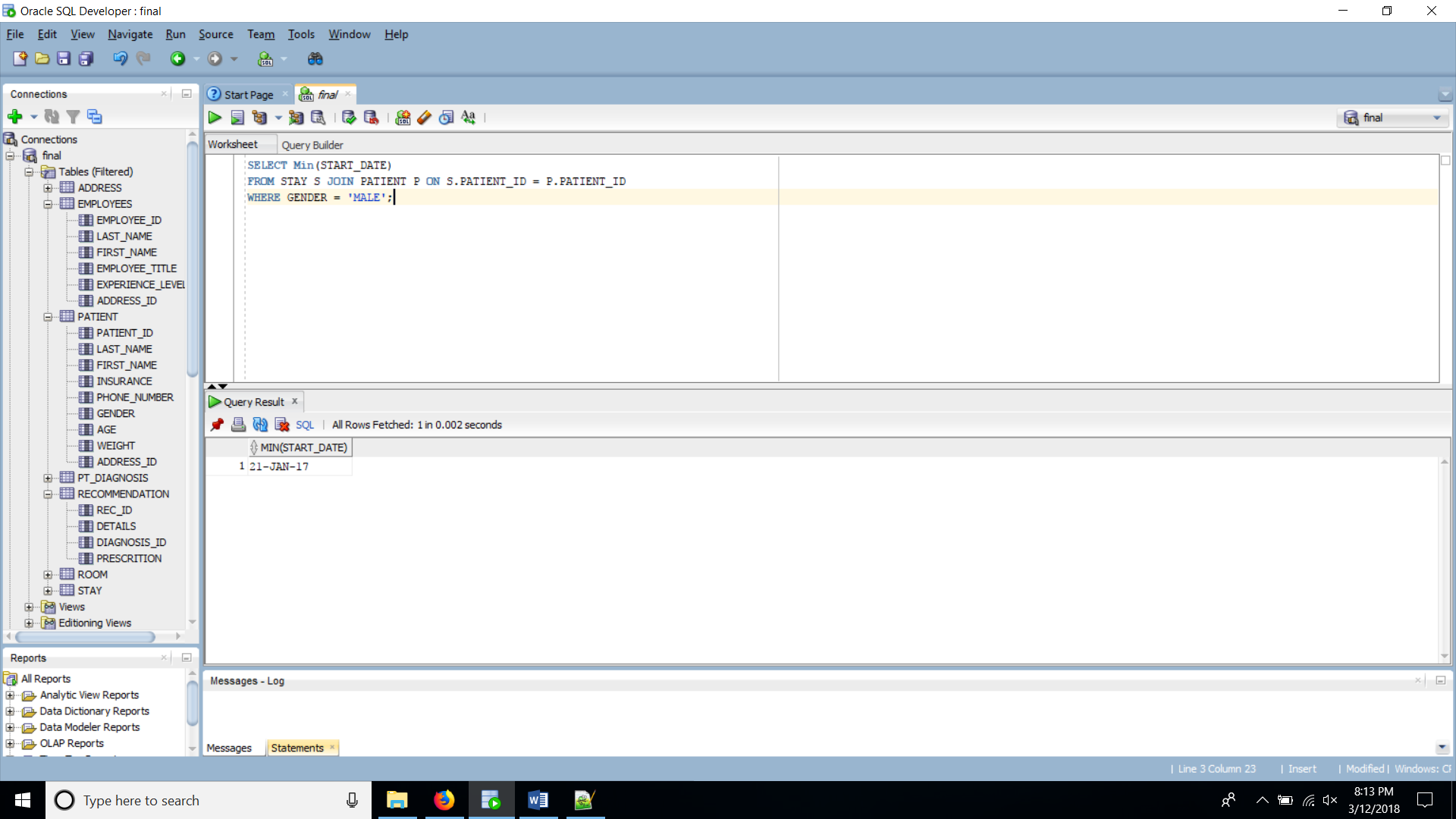


**Aggregate Function #4**

SELECT Min(START\_DATE)

FROM STAY S JOIN PATIENT P ON S.PATIENT\_ID = P.PATIENT\_ID

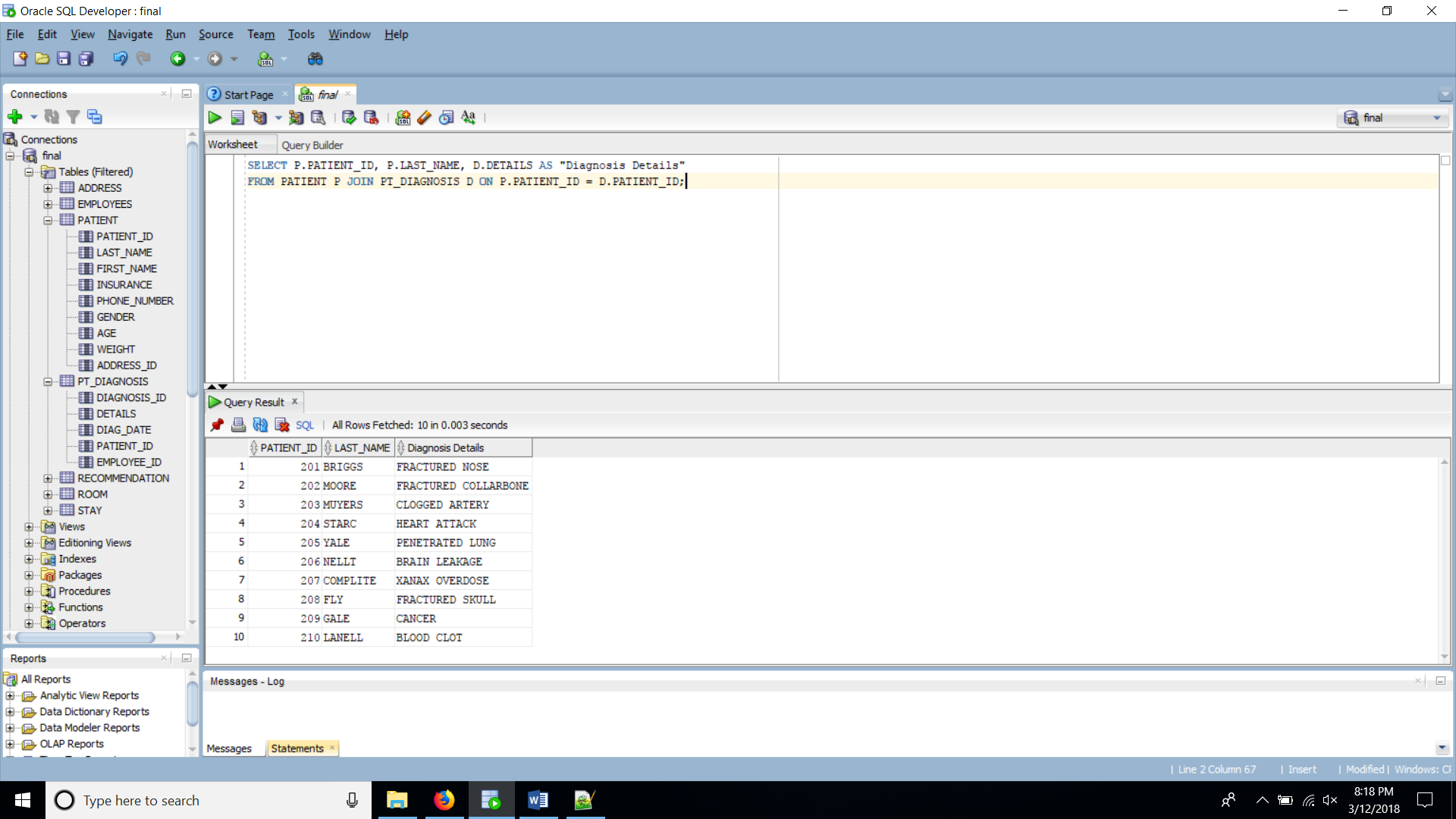
WHERE GENDER = 'MALE';



**Join #1**

SELECT P.PATIENT\_ID, P.LAST\_NAME, D.DETAILS AS "Diagnosis Details"

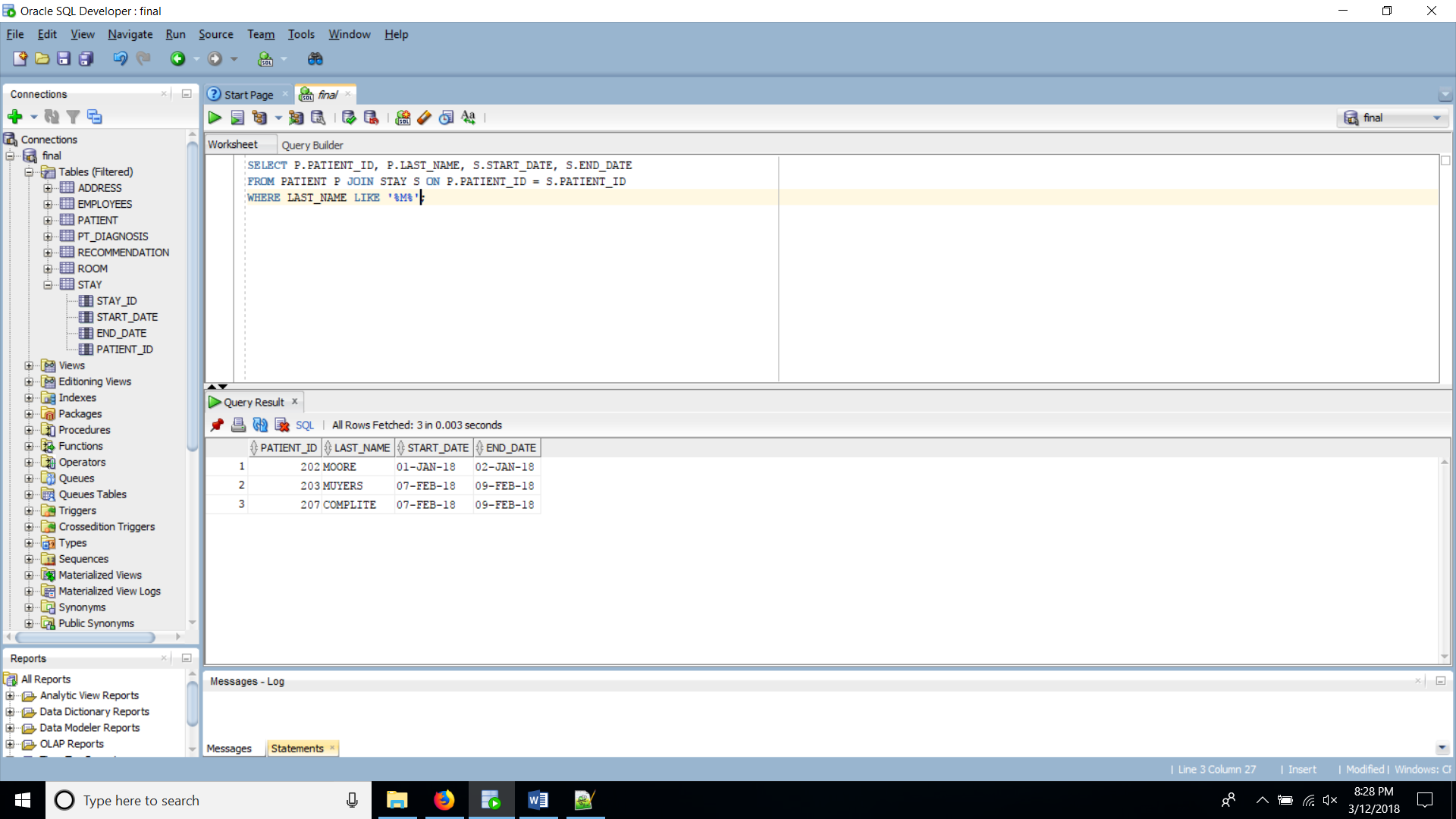
FROM PATIENT P JOIN PT\_DIAGNOSIS D ON P.PATIENT\_ID = D.PATIENT\_ID;



**Join #2**

SELECT P.PATIENT\_ID, P.LAST\_NAME, S.START\_DATE, S.END\_DATE

FROM PATIENT P JOIN STAY S ON P.PATIENT\_ID = S.PATIENT\_ID

WHERE LAST\_NAME LIKE '%M%';

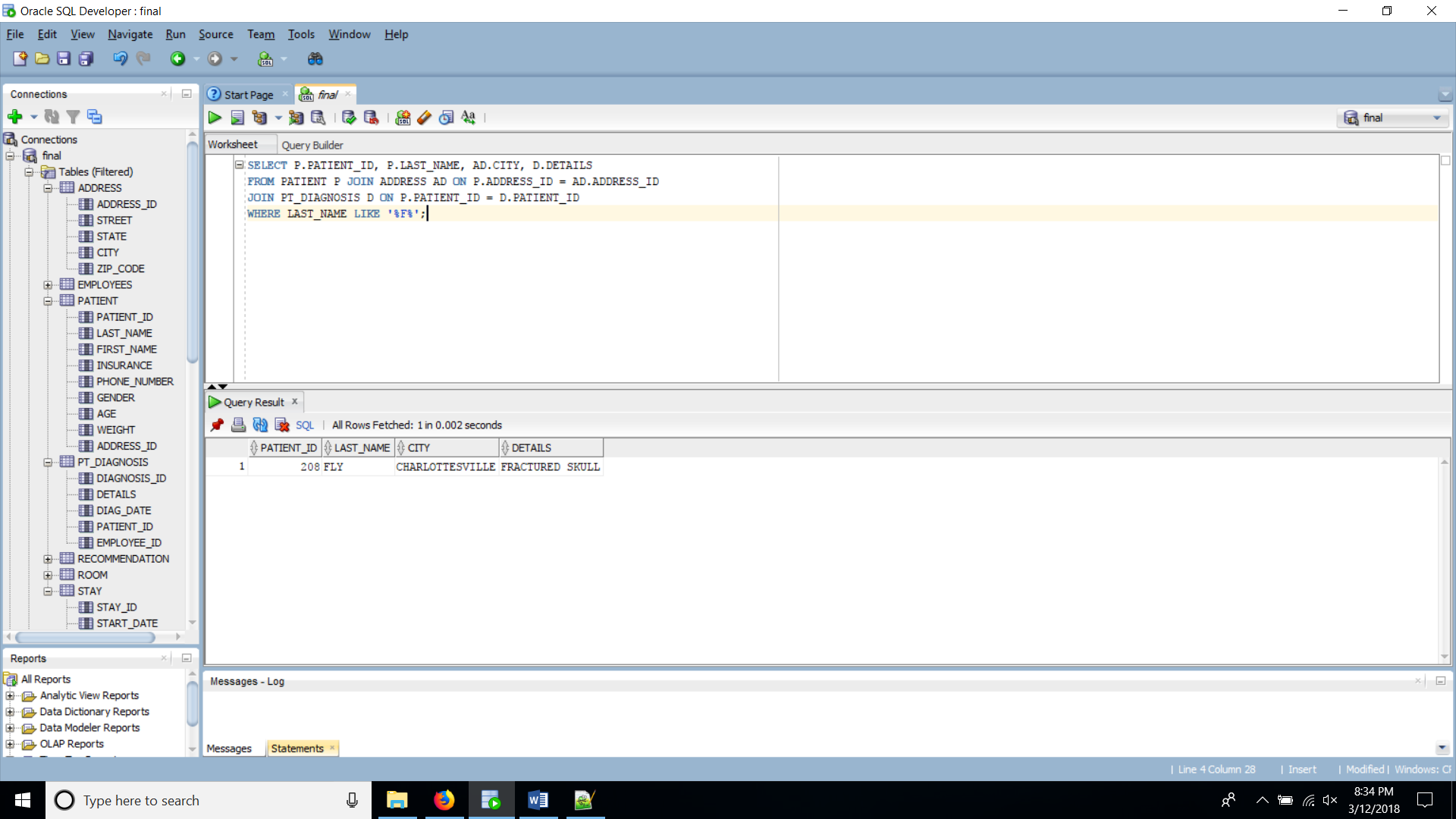
**Join with 3 tables #1**

SELECT P.PATIENT\_ID, P.LAST\_NAME, AD.CITY, D.DETAILS

FROM PATIENT P JOIN ADDRESS AD ON P.ADDRESS\_ID = AD.ADDRESS\_ID

JOIN PT\_DIAGNOSIS D ON P.PATIENT\_ID = D.PATIENT\_ID

WHERE LAST\_NAME LIKE '%F%';

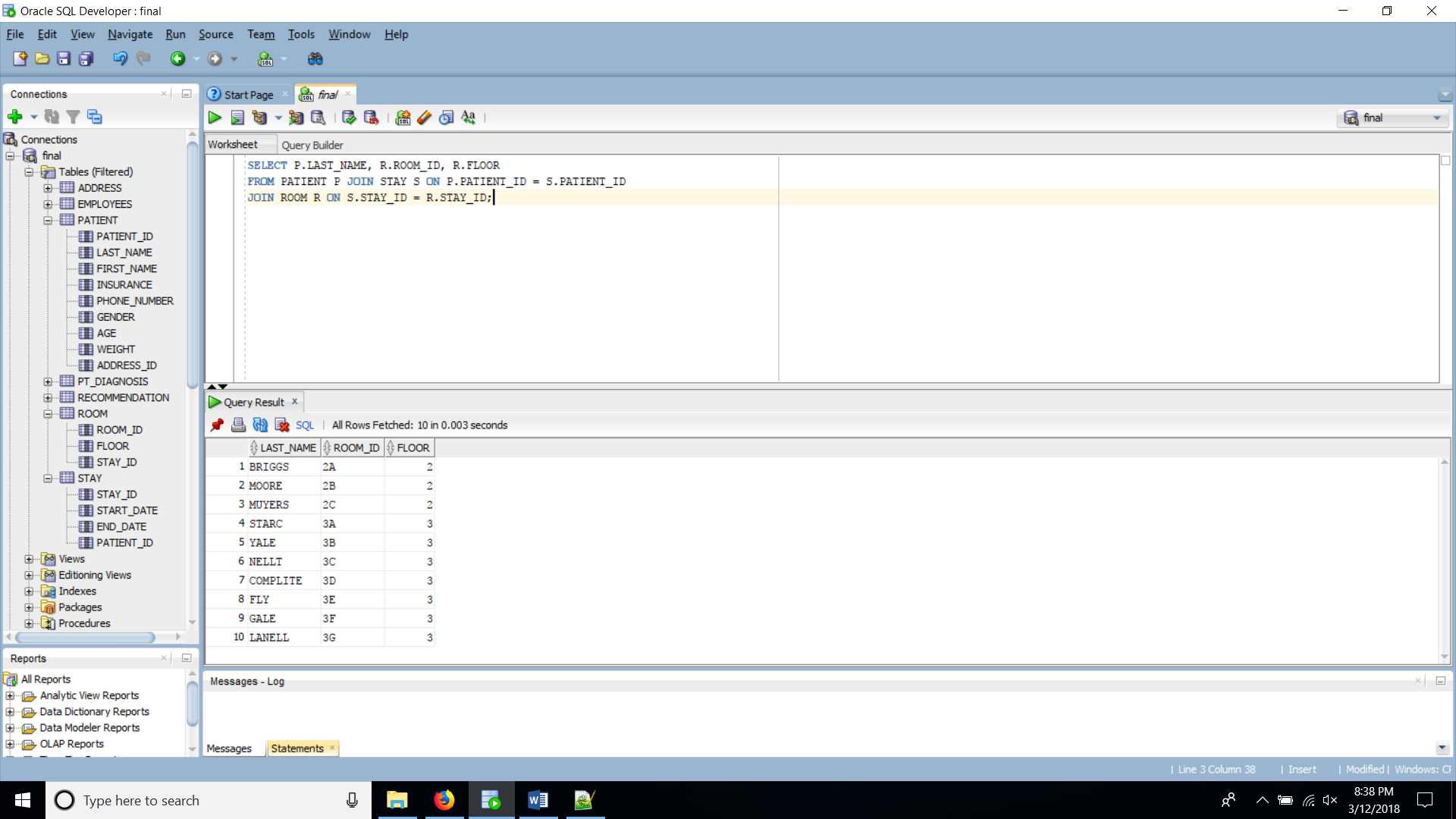


**Join with 3 tables #2**

SELECT P.LAST\_NAME, R.ROOM\_ID, R.FLOOR

FROM PATIENT P JOIN STAY S ON P.PATIENT\_ID = S.PATIENT\_ID

JOIN ROOM R ON S.STAY\_ID = R.STAY\_ID;



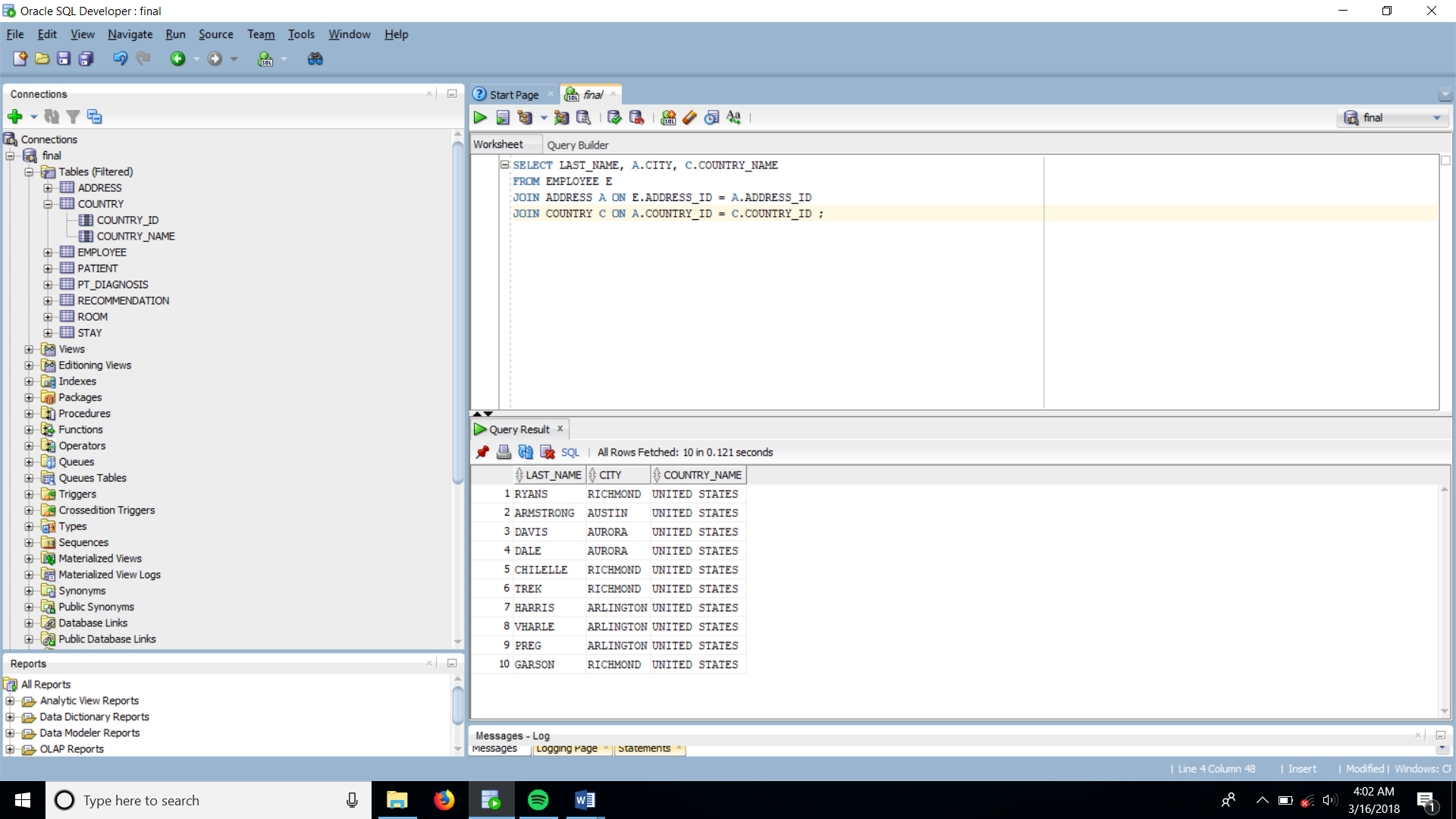
**Join with 3 tables #3**

SELECT LAST\_NAME, A.CITY, C.COUNTRY\_NAME

FROM EMPLOYEE E

JOIN ADDRESS A ON E.ADDRESS\_ID = A.ADDRESS\_ID

JOIN COUNTRY C ON A.COUNTRY\_ID = C.COUNTRY\_ID ;



**Sub query (nested query)**

SELECT P.PATIENT\_ID, P.LAST\_NAME

FROM PATIENT P

WHERE PATIENT\_ID IN

(SELECT PATIENT\_ID

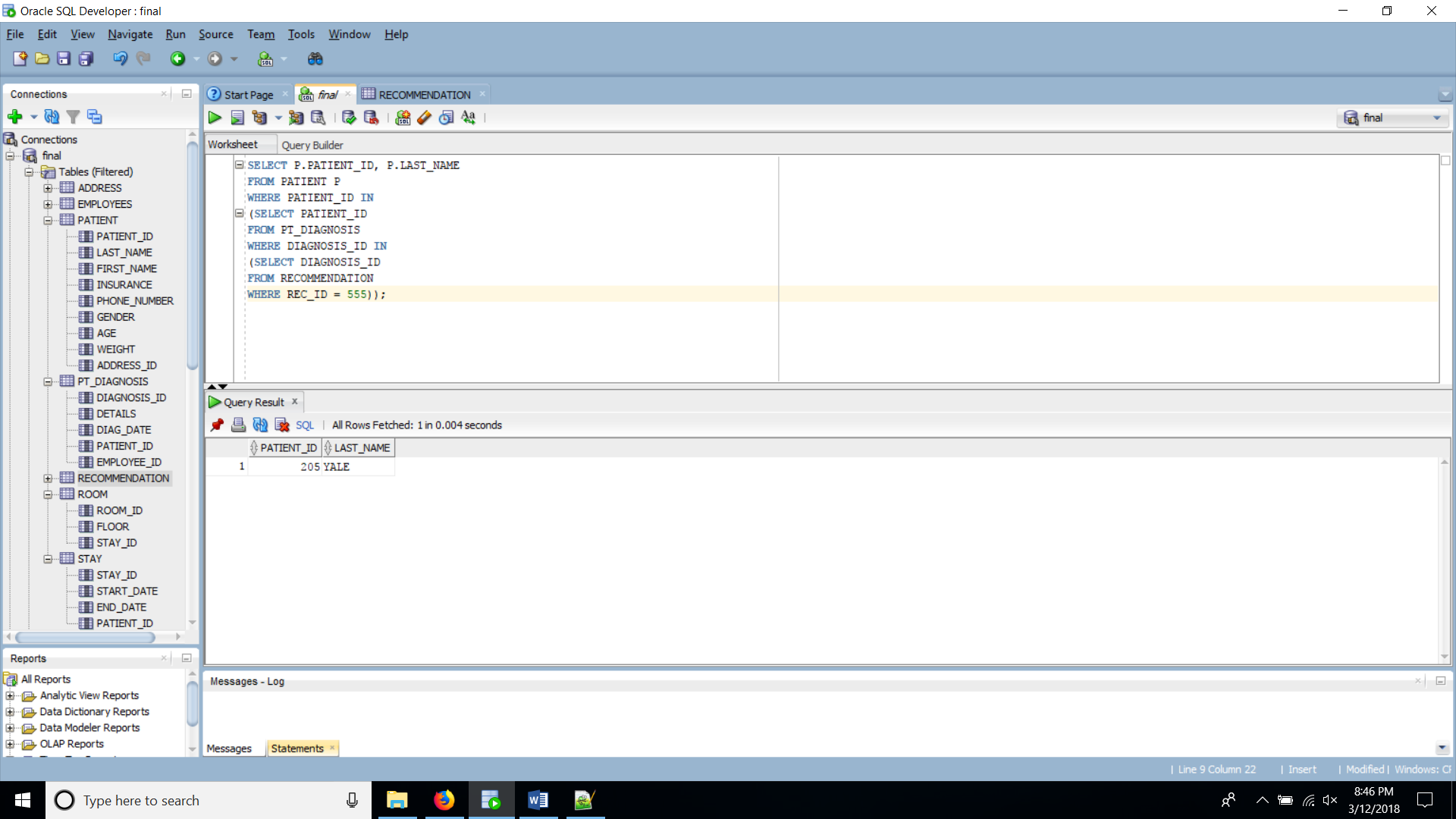
FROM PT\_DIAGNOSIS

WHERE DIAGNOSIS\_ID IN

(SELECT DIAGNOSIS\_ID

FROM RECOMMENDATION

WHERE REC\_ID = 555));



**Set operator #1**

SELECT LAST\_NAME, ADDRESS\_ID, EMPLOYEE\_ID,00 AS "PATIENT\_ID"

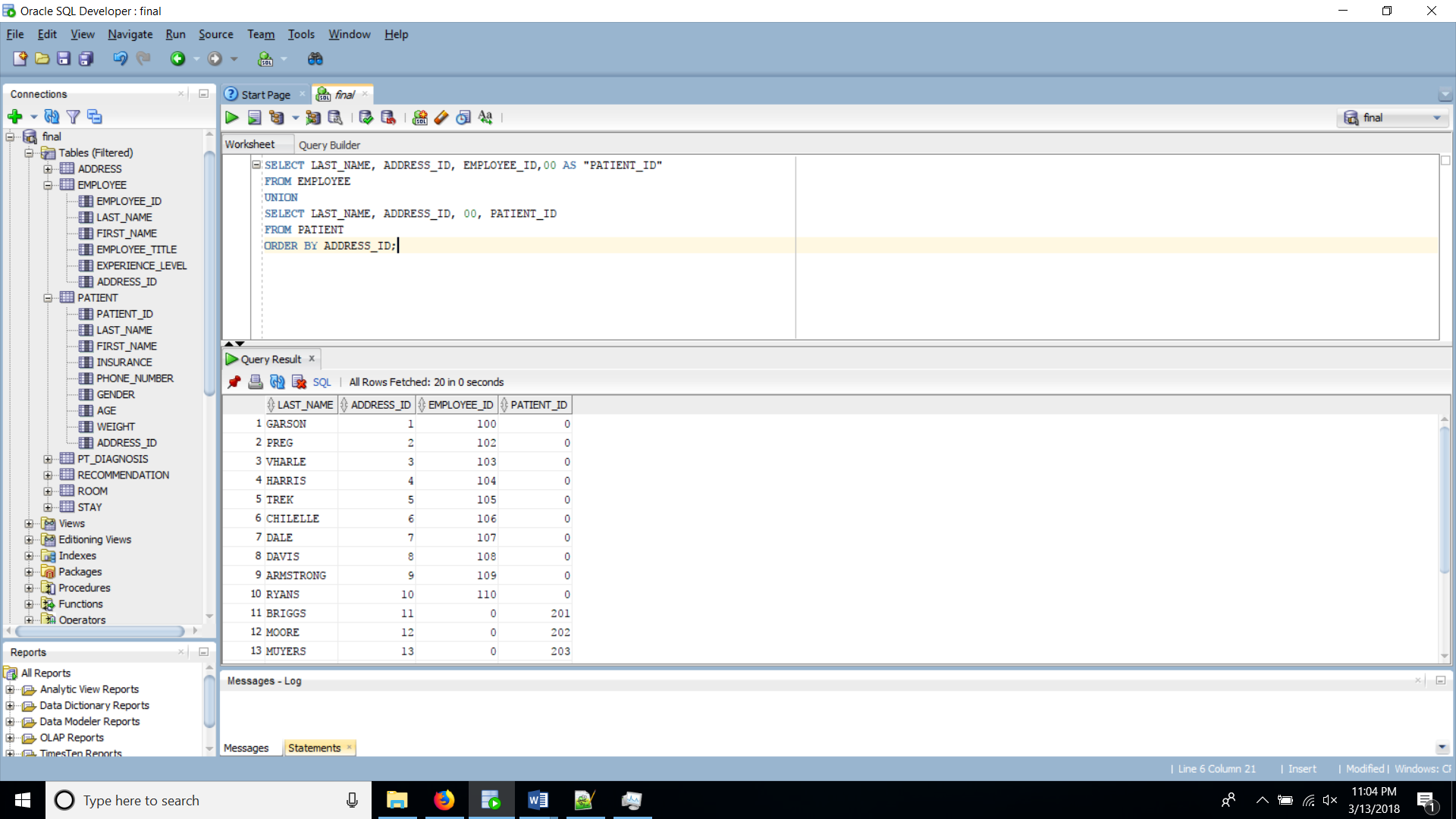
FROM EMPLOYEE

UNION

SELECT LAST\_NAME, ADDRESS\_ID, 00, PATIENT\_ID

FROM PATIENT

ORDER BY ADDRESS\_ID;



**Set operator #2**

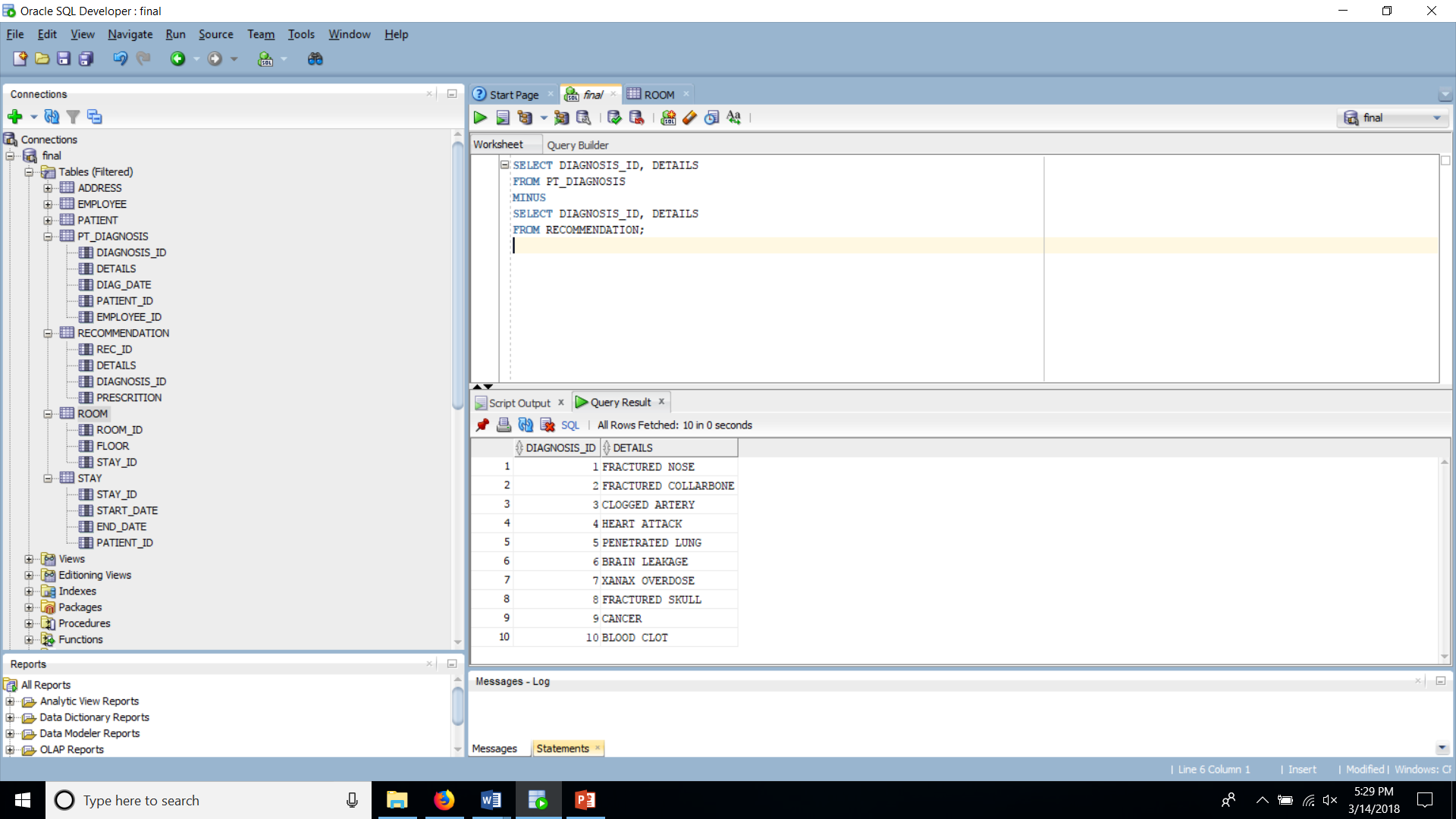
SELECT DIAGNOSIS\_ID, DETAILS

FROM PT\_DIAGNOSIS

MINUS

SELECT DIAGNOSIS\_ID, DETAILS

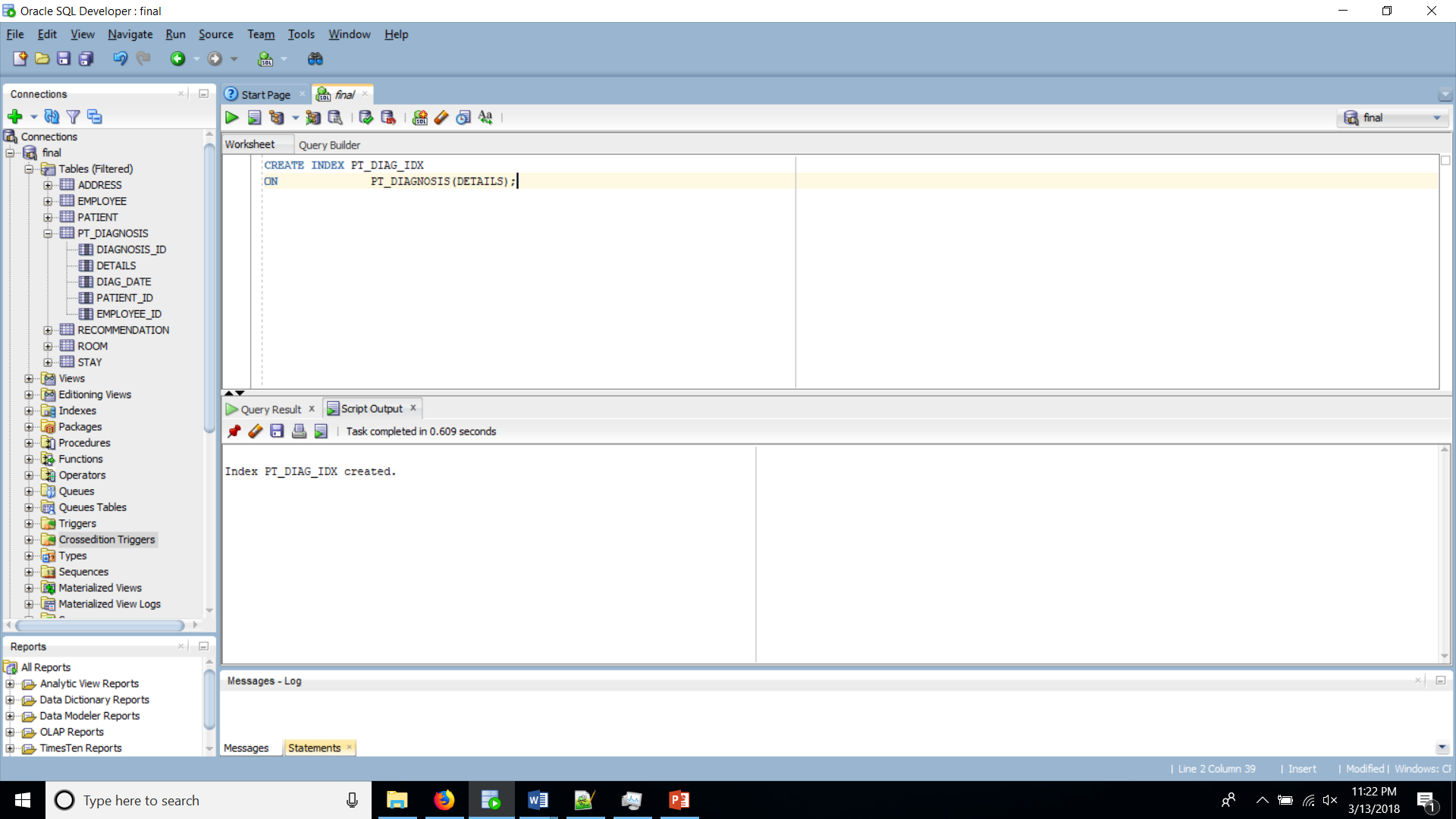
FROM RECOMMENDATION;



**INDEX Script- 1**

CREATE INDEX PT\_DIAG\_IDX

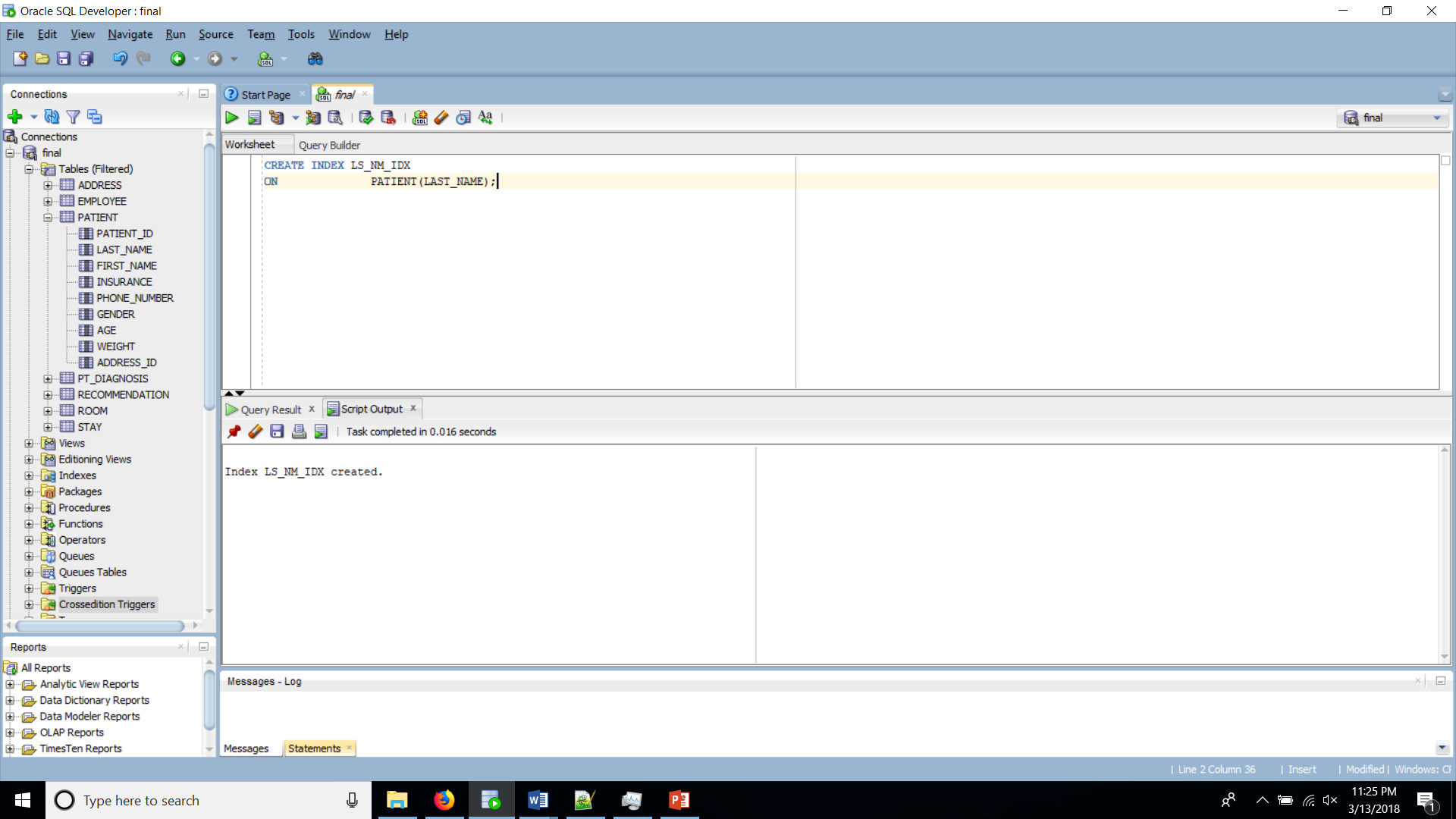
ON PT\_DIAGNOSIS(DETAILS);



**INDEX Script- 2**

CREATE INDEX LS\_NM\_IDX

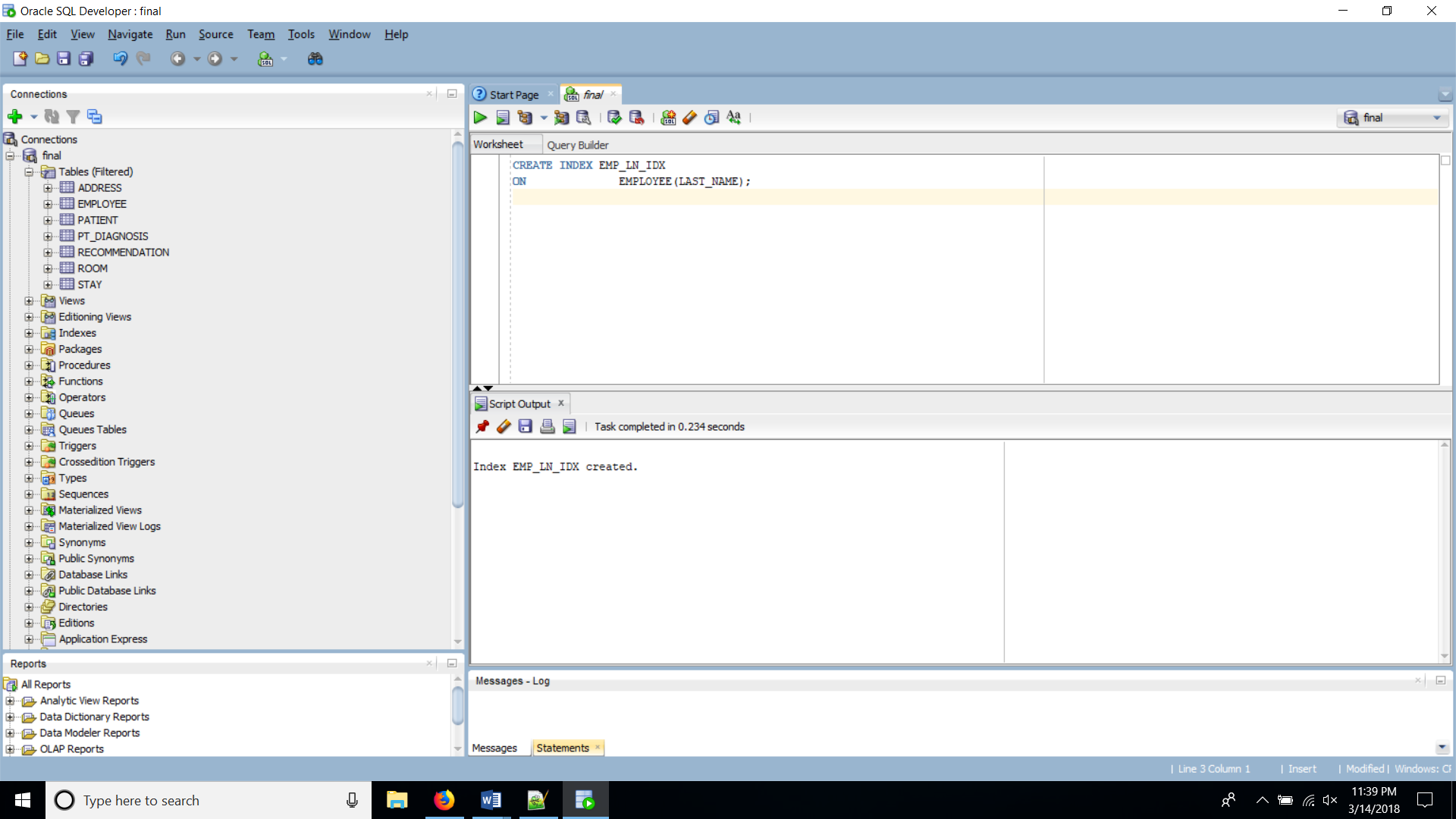
ON PATIENT(LAST\_NAME);



**INDEX Script- 3**

CREATE INDEX EMP\_LN\_IDX

ON EMPLOYEE(LAST\_NAME);



**View 1-**

CREATE VIEW PATEMPVU1

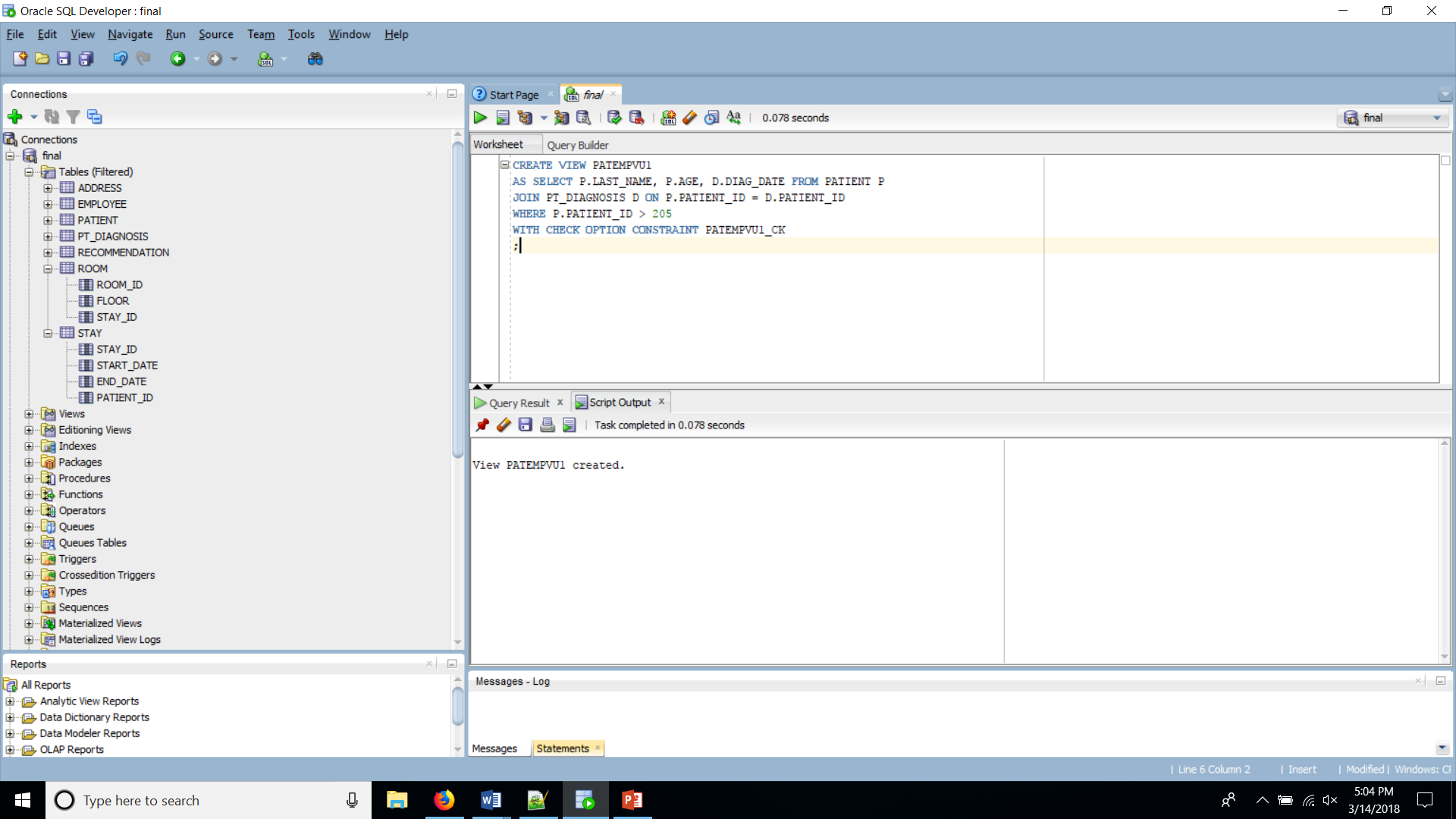
AS SELECT P.LAST\_NAME, P.AGE, D.DIAG\_DATE FROM PATIENT P

JOIN PT\_DIAGNOSIS D ON P.PATIENT\_ID = D.PATIENT\_ID

WHERE P.PATIENT\_ID > 205

WITH CHECK OPTION CONSTRAINT PATEMPVU1\_CK

;



**View 2-**

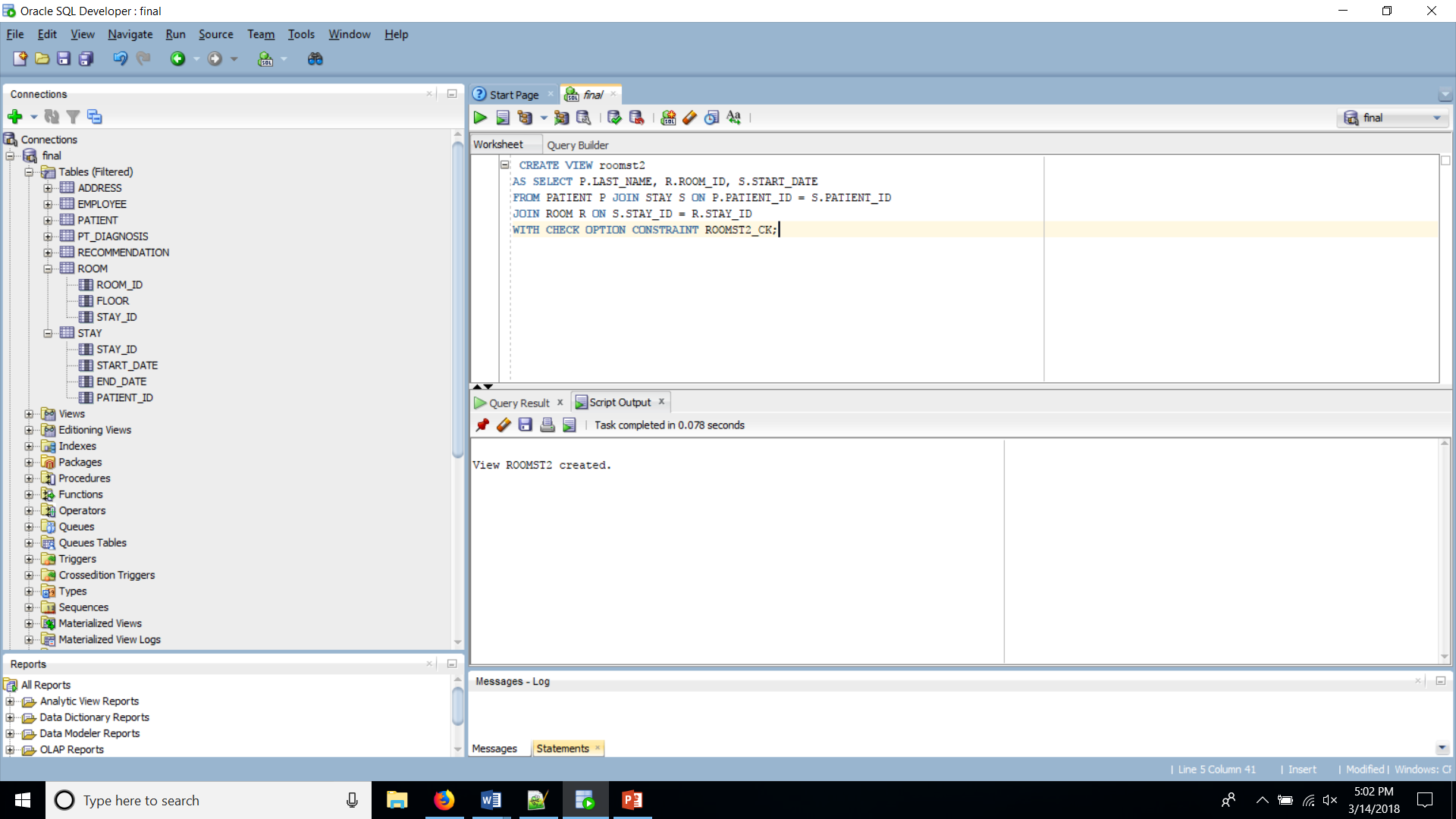
CREATE VIEW roomst2

AS SELECT P.LAST\_NAME, R.ROOM\_ID, S.START\_DATE

FROM PATIENT P JOIN STAY S ON P.PATIENT\_ID = S.PATIENT\_ID

JOIN ROOM R ON S.STAY\_ID = R.STAY\_ID

WITH CHECK OPTION CONSTRAINT ROOMST2\_CK;



**Sequence-**

CREATE SEQUENCE PAT\_ID\_SEQ

INCREMENT BY 1

START WITH 200

MAXVALUE 210

NOCACHE

NOCYCLE;

