**Team Peter and Priya**

**Docker image location -** <https://hub.docker.com/r/wnameless/oracle-xe-11g/>

**Command to pull -** $ docker pull wnameless/oracle-xe-11g

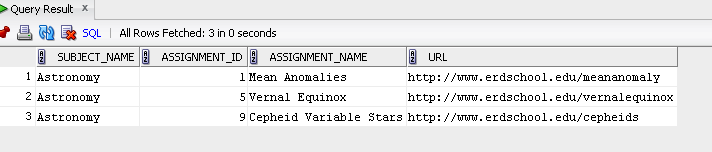
**--Display a list of student assignments for a subject.Sample subject id = 1**

SELECT S.SUBJECT\_NAME, g.ASSIGNMENT\_ID, g.ASSIGNMENT\_NAME, g.URL

FROM ASSIGNMENT G, SUBJECT S

WHERE S.SUBJECT\_ID = G.FK\_SUBJECT\_ID

and g.fk\_subject\_id=1;



**-- Display a list of all students taught by a given teacher. Sample teacher - Teacher id 2, Carolyn Porco**

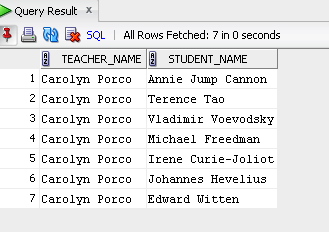
SELECT T.First\_name||' '||t.last\_Name as teacher\_Name, S.FNAME||' '||s.LName as student\_name

FROM STUDENT S, HOMEROOM H, teacher t

WHERE S.FK\_HOMEROOM\_ID = H.HOMEROOM\_ID

AND H.FK\_TEACHER\_ID = T.TEACHER\_ID

and t.teacher\_id = 2;



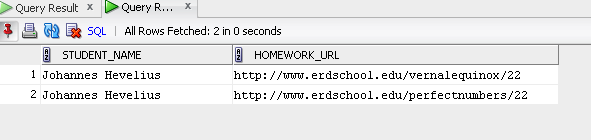
**-- DISPLAY A LIST OF ALL THE STUDENT WORK BY A STUDENT. Sample student\_id = 22**

SELECT S.FNAME||' '||S.LNAME as student\_Name, H.URL as homework\_URL

FROM HOMEWORK H, STUDENT S

WHERE S.STUDENT\_ID = H.FK\_STUDENT\_ID

and S.STUDENT\_ID = 22;



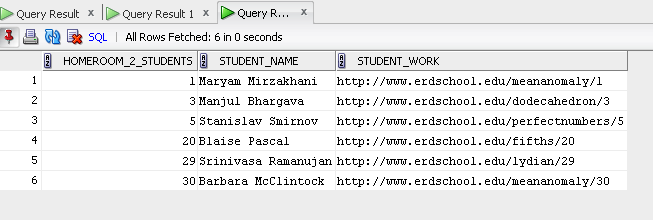
**-- Display a list of student work for a classroom. Sample homeroom\_id = 2**

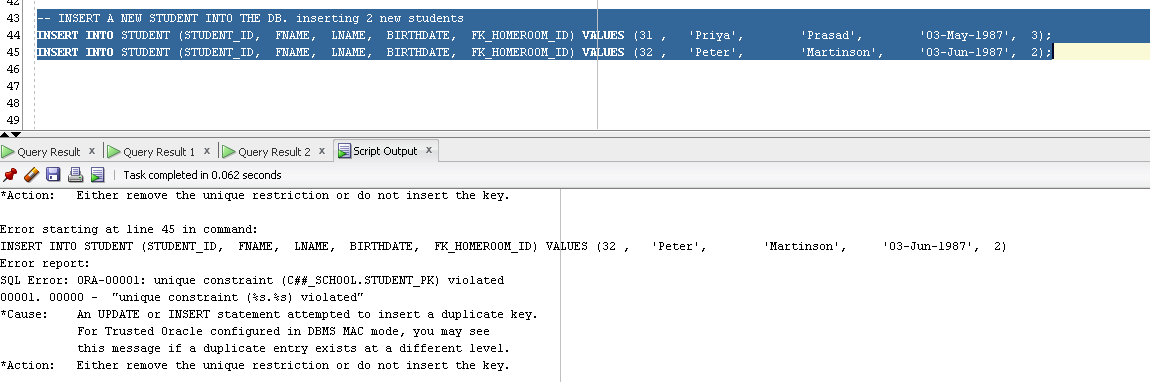
SELECT h.FK\_STUDENT\_ID AS HOMEROOM\_2\_STUDENTS, s.fname||' '||s.lname as Student\_Name, h.URL AS STUDENT\_WORK

FROM HOMEWORK h, STUDENT S

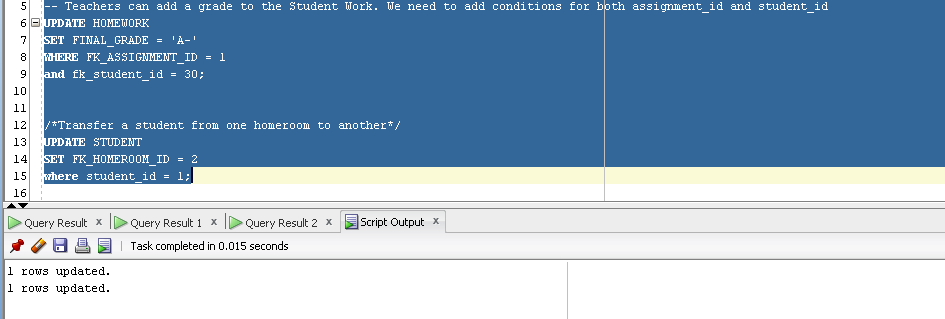
WHERE FK\_STUDENT\_ID IN ( SELECT STUDENT\_ID FROM STUDENT WHERE FK\_HOMEROOM\_ID = 2)

and s.student\_id = h.fk\_student\_id;



**Primary key validation – inserting duplicate student\_id displays appropriate error messages**

**Update operations –**



**-- Display a list of all teachers not teaching a subject**

**-- \*\* This is to show a useful application of LEFT OUTER JOINs \*\***

SELECT DISTINCT

teacher.first\_name || ' ' || teacher.last\_name AS teacher\_name

, teacher.teacher\_id

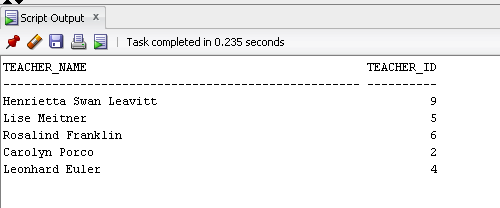
FROM

teacher

LEFT OUTER JOIN subject

ON SUBJECT.FK\_TEACHER\_ID = TEACHER.TEACHER\_ID

WHERE subject.subject\_id IS NULL;



**-- Replace a subject's teacher with a substitute. Sample subject\_id = 3**

**-- First, find a possible substitute:**

SELECT DISTINCT

subject.subject\_name

, teacher.first\_name || ' ' || teacher.last\_name AS current\_teacher

, teacher.preferred\_subject

, possible\_sub.first\_name || ' ' || possible\_sub.last\_name AS possible\_sub

, possible\_sub.teacher\_id

FROM

subject

INNER JOIN teacher

ON teacher.teacher\_id = subject.fk\_teacher\_id

LEFT OUTER JOIN teacher possible\_sub

ON possible\_sub.preferred\_subject = teacher.preferred\_subject

AND possible\_sub.teacher\_id <> teacher.teacher\_id

AND POSSIBLE\_SUB.TEACHER\_ID NOT IN ( SELECT FK\_TEACHER\_ID FROM SUBJECT)

WHERE subject.subject\_id = 3;

**-- Second, update the subject table**

UPDATE subject

SET FK\_TEACHER\_ID = 9

WHERE subject\_id = 3;

