

# Advanced SQL Techniques

Submitted on February 16, 2022

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## PROMPT

### Exercise 1, Question 1:

Write and execute a SQL query to list the school names, community names and average attendance for communities with a hardship index of 98.

Take a screenshot showing the SQL query and its results. Upload the JPEG (.jpg) file below for your peers to review.

the school names, community names and average attendance for communities with a hardship index of 98

Showing rows 0 - 3 (4 total, Query took 0.0022 seconds.)

```
SELECT cps.NAME_OF_SCHOOL, cps.AVERAGE_STUDENT_ATTENDANCE, csd.COMMUNITY_AREA_NAME, csd.HARDSHIP_INDEX FROM chicago_public_schools as cps LEFT JOIN
chicago_socioeconomic_data AS csd ON cps.COMMUNITY_AREA_NUMBER = csd.COMMUNITY_AREA_NUMBER WHERE csd.HARDSHIP_INDEX = 98
```

☐ Profiling [\[Edit inline\]](#) [\[ Edit \]](#) [\[ Explain SQL \]](#) [\[ Create PHP code \]](#) [\[ Refresh \]](#)

☐ Show all

Number of rows: 

25

Filter rows: 

Search this table

+ Options

NAME_OF_SCHOOL	AVERAGE_STUDENT_ATTENDANCE	COMMUNITY_AREA_NAME	HARDSHIP_INDEX
George Washington Carver Military Academy High Sch...	91.60%	Riverdale	98
George Washington Carver Primary School	90.90%	Riverdale	98
Ira F Aldridge Elementary School	92.90%	Riverdale	98
William E B Dubois Elementary School	93.30%	Riverdale	98

☐ Show all

Number of rows: 

25

Filter rows: 

Search this table

```
SELECT cps.NAME_OF_SCHOOL, cps.AVERAGE_STUDENT_ATTENDANCE, csd.COMMUNITY_AREA_NAME,
csd.HARDSHIP_INDEX FROM chicago_public_schools as cps LEFT JOIN chicago_socioeconomic_data AS csd ON
cps.COMMUNITY_AREA_NUMBER = csd.COMMUNITY_AREA_NUMBER WHERE csd.HARDSHIP_INDEX = 98
```

## RUBRIC

Did the learner find the correct 4 rows from the two tables?

TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).

- ☐

0 points

Did not attempt the problem or response is incorrect.
- ☐

1 point

SQL query is incorrect, but does include a syntactically correct join. A syntactically correct left join should look like:

FROM <table name 1> <table alias 1>  
LEFT JOIN <table name 2> <table alias  
2> ON <table alias 1>.<column name>  
= <table alias 2>.<column name>

**or** a right join like:

FROM <table name 1> <table alias 1>  
RIGHT JOIN <table name 2> <table  
alias 2> ON <table alias 1>.<column  
name> = <table alias 2>.<column  
name>



2 points

SQL query is correct; it uses a join, but  
returns more than 4 rows. The SQL  
query should either use a left join like:

FROM census\_data a LEFT JOIN  
chicago\_public\_schools b

ON a.community\_area\_number =  
b.community\_area\_number

**or** a right join like:

FROM chicago\_public\_schools a  
RIGHT JOIN census\_data b

ON a.community\_area\_number =  
b.community\_area\_number



3 points

**SQL query is correct; it uses a join  
and returns 4 rows. The SQL query  
should either use a left join like:**

**FROM census\_data a LEFT JOIN  
chicago\_public\_schools b**

**ON a.community\_area\_number =  
b.community\_area\_number**

**or a right join like:**



```
FROM chicago_public_schools a
RIGHT JOIN census_data b

ON a.community_area_number =
b.community_area_number
```

## PROMPT

### Exercise 1, Question 2:

Write and execute a SQL query to list all crimes that took place at a school. Include case number, crime type and community name.

Take a screenshot showing the SQL query and its results. Upload the JPEG (.jpg) file below for your peers to review.

list all crimes that took place at a school. Include case number, crime type and community name.

✓ Showing rows 0 - 11 (12 total, Query took 0.0015 seconds.)

```
SELECT cc.CASE_NUMBER, cc.PRIMARY_TYPE, csd.COMMUNITY_AREA_NAME, cc.LOCATION_DESCRIPTION FROM chicago_crime AS cc LEFT JOIN chicago_socioeconomic_data AS csd ON cc.COMMUNITY_AREA_NUMBER = csd.COMMUNITY_AREA_NUMBER WHERE cc.LOCATION_DESCRIPTION LIKE "%SCHOOL%"
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

CASE_NUMBER	PRIMARY_TYPE	COMMUNITY_AREA_NAME	LOCATION_DESCRIPTION
HL353697	BATTERY	South Shore	SCHOOL, PUBLIC, GROUNDS
HL725506	BATTERY	Lincoln Square	SCHOOL, PUBLIC, BUILDING
HP716225	BATTERY	Douglas	SCHOOL, PUBLIC, BUILDING
HH639427	BATTERY	Austin	SCHOOL, PUBLIC, BUILDING
JA460432	BATTERY	Ashburn	SCHOOL, PUBLIC, GROUNDS
HS200939	CRIMINAL DAMAGE	Austin	SCHOOL, PUBLIC, GROUNDS
HK577020	NARCOTICS	Rogers Park	SCHOOL, PUBLIC, GROUNDS
HS305355	NARCOTICS	Brighton Park	SCHOOL, PUBLIC, BUILDING
HT315369	ASSAULT	East Garfield Park	SCHOOL, PUBLIC, GROUNDS
HR585012	CRIMINAL TRESPASS	Ashburn	SCHOOL, PUBLIC, GROUNDS
HH292682	PUBLIC PEACE VIOLATION	CHICAGO	SCHOOL, PRIVATE, BUILDING
G635735	PUBLIC PEACE VIOLATION	CHICAGO	SCHOOL, PUBLIC, BUILDING

```
SELECT cc.CASE_NUMBER, cc.PRIMARY_TYPE, csd.COMMUNITY_AREA_NAME, cc.LOCATION_DESCRIPTION FROM
chicago_crime AS cc LEFT JOIN chicago_socioeconomic_data AS csd ON cc.COMMUNITY_AREA_NUMBER =
csd.COMMUNITY_AREA_NUMBER WHERE cc.LOCATION_DESCRIPTION LIKE "%SCHOOL%"
```

## RUBRIC

Did the learner find the correct 4 rows from the two tables?

TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or  
response is incorrect.



1 point

SQL query is incorrect but does include a syntactically correct join. A syntactically correct left join should look like:

```
FROM <table name 1> <table alias 1>
LEFT JOIN <table name 2> <table alias 2> ON <table alias 1>.<column name>
= <table alias 2>.<column name>
```

or a right join like:

```
FROM <table name 1> <table alias 1>
RIGHT JOIN <table name 2> <table alias 2> ON <table alias 1>.<column name>
= <table alias 2>.<column name>
```



2 points

SQL query is correct; it uses a join but returns more than 12 rows. The SQL query should either use a left join like:

```
FROM chicago_crime_data a LEFT
JOIN census_data b ON
a.community_area_number =
b.community_area_number
```

or a right join like:

```
FROM census_data a RIGHT JOIN
chicago_crime_data b ON
a.community_area_number =
b.community_area_number
```



3 points

SQL query is correct; it uses a join and returns 12 rows. The SQL query should either use a left join like:

```
FROM chicago_crime_data a LEFT
JOIN census_data b ON
a.community_area_number =
b.community_area_number
```



or a right join like:

```
FROM census_data a RIGHT JOIN  
chicago_crime_data b ON  
a.community_area_number =  
b.community_area_number
```

## PROMPT

### Exercise 2, Question 1:

Write and execute a SQL statement that returns just the school name and leaders' icon from the view.

Take a screenshot showing the SQL query and its results. Upload the JPEG (.jpg) file below for your peers to review.

the school name and leaders' icon from the view

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0063 seconds.)

CREATE OR REPLACE VIEW School\_Data AS SELECT NAME\_OF\_SCHOOL School\_Name, Leaders\_Icon Leaders\_Rating FROM chicago\_public\_schools

[Edit inline]

⚠ Current selection does not contain a unique column. Grid edit, Edit, Copy and Delete features may result in undesired behavior. ⓘ

Showing rows 0 - ... ⓘ (Query took 0.0009 seconds.)

SELECT \* FROM School\_Data

☐ Profiling [Edit inline] [Edit] [Explain SQL]

> >> ☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

	School_Name	Leaders_Rating
<input type="checkbox"/> Edit Copy Delete	Abraham Lincoln Elementary School	Weak
<input type="checkbox"/> Edit Copy Delete	Adam Clayton Powell Paideia Community Academy Elementary School	Weak
<input type="checkbox"/> Edit Copy Delete	Adlai E Stevenson Elementary School	Weak
<input type="checkbox"/> Edit Copy Delete	Agustin Lara Elementary Academy	Weak
<input type="checkbox"/> Edit Copy Delete	Air Force Academy High School	Weak
<input type="checkbox"/> Edit Copy Delete	Albany Park Multicultural Academy	Weak
<input type="checkbox"/> Edit Copy Delete	Albert G Lane Technical High School	Weak
<input type="checkbox"/> Edit Copy Delete	Albert R Sabin Elementary Magnet School	Weak
<input type="checkbox"/> Edit Copy Delete	Alcott High School for the Humanities	Weak
<input type="checkbox"/> Edit Copy Delete	Alessandro Volta Elementary School	Weak
<input type="checkbox"/> Edit Copy Delete	Alexander Graham Bell Elementary School	Weak
<input type="checkbox"/> Edit Copy Delete	Alexander Graham Elementary School	Weak

```
CREATE OR REPLACE VIEW School_Data AS SELECT NAME_OF_SCHOOL School_Name, Leaders_Icon  
Leaders_Rating FROM chicago_public_schools; SELECT * FROM School_Data;
```

## RUBRIC

Did the learner successfully use the view to return the two columns in their SELECT statement?

TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or response is incorrect.



1 point

SQL query returns some data from the view, but not necessarily the specified columns or using the correct names.



2 points

SQL query correctly returns two columns, named **SCHOOL\_NAME** and **LEADERS\_RATING** from the view that they created.



## PROMPT

### Exercise 3, Question 1:

Write the structure of a query to create or replace a stored procedure called `UPDATE_LEADERS_SCORE` that takes a `in_School_ID` parameter as an integer and a `in_Leader_Score` parameter as an integer. Don't forget to use the `#SET TERMINATOR` statement to use the `@` for the `CREATE` statement terminator.

Take a screenshot showing the SQL query. Upload the JPEG (.jpg) file below for your peers to review.

create or replace a stored procedure called `UPDATE_LEADERS_SCORE`

✓ Routine 'UPDATE\_LEADERS\_SCORE' has been created.

```
CREATE PROCEDURE `UPDATE_LEADERS_SCORE` (IN `in_School_ID` INT, IN `in_Leader_Score` INT) NOT DETERMINISTIC READS SQL DATA SQL SECURITY DEFINER BEGIN
SELECT * FROM chicago_public_schools; END
```

[\[Edit inline\]](#) [\[ Edit \]](#) [\[ Create PHP code \]](#)

Routines ⓘ

Name	Action	Type	Returns
<input type="checkbox"/> UPDATE_LEADERS_SCORE	<a href="#">Edit</a> <a href="#">Execute</a> <a href="#">Export</a> <a href="#">Drop</a>	PROCEDURE	

New

[Add routine](#) ⓘ

```
CREATE PROCEDURE `UPDATE_LEADERS_SCORE` (IN `in_School_ID` INT, IN `in_Leader_Score` INT) NOT DETERMINISTIC READS SQL DATA SQL SECURITY DEFINER BEGIN SELECT * FROM chicago_public_schools; END
```

**RUBRIC**

Did the learner successfully write the shell of the SQL statement?

TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or response is incorrect.



1 point

SQL query contains most of the following, but has one line missing. --  
**#SET TERMINATOR @ CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE (IN in\_School\_ID INTEGER, IN in\_Leader\_Score INTEGER) LANGUAGE SQL BEGIN END@**



2 points

SQL query is similar to the following:

**--#SET TERMINATOR @ CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE (IN in\_School\_ID INTEGER, IN in\_Leader\_Score INTEGER) LANGUAGE SQL BEGIN END@**



## PROMPT

### Exercise 3, Question 2:

Inside your stored procedure, write a SQL statement to update the Leaders\_Score field in the CHICAGO\_PUBLIC\_SCHOOLS table for the school identified by in\_School\_ID to the value in the in\_Leader\_Score parameter.

Take a screenshot showing the SQL query. Upload the JPEG (.jpg) file below for your peers to review.

update the Leaders\_Score field in the CHICAGO\_PUBLIC\_SCHOOLS table

```
1  --#SET TERMINATOR @
2  CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE(
3  IN in_School_ID INTEGER,
4  IN in_Leader_Score INTEGER)
5
6  LANGUAGE SQL
7  MODIFIES SQL DATA
8
9  BEGIN
10
11  UPDATE CHICAGO_PUBLIC_SCHOOLS
12  SET "Leaders_Score" = in_Leader_Score
13  WHERE "School_ID" = in_School_ID;
14
15  END
16
17  @
```



CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE...

Run time: 0.054 s

Status: Success | Affected Rows: 0

--#SET TERMINATOR @ CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE( IN in\_SchoolID INTEGER, IN in\_Leader\_Score INTEGER) LANGUAGE SQL MODIFIES SQL DATA BEGIN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Score" = in\_Leader\_Score WHERE "School ID" = in\_School ID; END @

## RUBRIC

Did the learner successfully write the update statement inside the stored procedure definition? TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or response is incorrect.



1 point

SQL query contains most of the following, but has one line missing. --  
#SET TERMINATOR @ CREATE OR  
REPLACE PROCEDURE  
UPDATE\_LEADERS\_SCORE (IN  
in\_School\_ID INTEGER, IN  
in\_Leader\_Score INTEGER)  
LANGUAGE SQL BEGIN UPDATE  
CHICAGO\_PUBLIC\_SCHOOLS SET  
"Leaders\_Score" = in\_Leader\_Score  
WHERE "School\_ID" = in\_School\_ID;  
END@



2 points

SQL query is similar to the following:

--#SET TERMINATOR @ CREATE OR  
REPLACE PROCEDURE  
UPDATE\_LEADERS\_SCORE (IN  
in\_School\_ID INTEGER, IN  
in\_Leader\_Score INTEGER)  
LANGUAGE SQL BEGIN UPDATE  
CHICAGO\_PUBLIC\_SCHOOLS SET  
"Leaders\_Score" = in\_Leader\_Score  
WHERE "School\_ID" = in\_School\_ID;  
END@



PROMPT

### Exercise 3, Question 3:

Inside your stored procedure, write a SQL IF statement to update the Leaders\_Icon field in the CHICAGO\_PUBLIC\_SCHOOLS table for the school identified by in\_School\_ID using the following information.

Take a screenshot showing the SQL query. Upload the JPEG (.jpg) file below for your peers to review.

SQL IF statement to update the Leaders\_Icon field in the CHICAGO\_PUBLIC\_SCHOOLS table



```

1  --#SET TERMINATOR @
2  CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE(
3  IN in_School_ID INTEGER, IN in_Leader_Score INTEGER)
4
5  LANGUAGE SQL
6  MODIFIES SQL DATA
7
8  BEGIN
9  UPDATE CHICAGO_PUBLIC_SCHOOLS
10 SET "Leaders_Score" = in_Leader_Score
11 WHERE "School_ID" = in_School_ID;
12 IF in_Leader_Score > 0 AND in_Leader_Score < 20
13 THEN
14 UPDATE CHICAGO_PUBLIC_SCHOOLS
15 SET "Leaders_Icon" = 'Very Weak';
16 ELSEIF in_Leader_Score < 40 THEN
17 UPDATE CHICAGO_PUBLIC_SCHOOLS
18 SET "Leaders_Icon" = 'Weak';
19 ELSEIF in_Leader_Score < 60 THEN
20 UPDATE CHICAGO_PUBLIC_SCHOOLS
21 SET "Leaders_Icon" = 'Average';
22 ELSEIF in_Leader_Score < 80 THEN
23 UPDATE CHICAGO_PUBLIC_SCHOOLS
24 SET "Leaders_Icon" = 'Strong';
25 ELSEIF in_Leader_Score < 100 THEN
26 UPDATE CHICAGO_PUBLIC_SCHOOLS
27 SET "Leaders_Icon" = 'Very Strong';
28 END IF;
29 END

```

✓ CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE( IN in... Run time: 0.121 s

Status: Success | Affected Rows: 0

```

--#SET TERMINATOR @ CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE( IN in School ID INTEGER,
IN in Leader Score INTEGER) LANGUAGE SQL MODIHES SQL DATA BEGIN UPDATE CHICAGO PUBLIC SCHOOLS
SET "Leaders_Score" = in Leader Score WHERE "School ID" = in School ID; IF in Leader Score > 0 AND in Leader
Score < 20 THEN UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders_Icon" = 'Very Weak; ELSEIF in Leader Score
< 40 THEN UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders_kon" ='Weak; ELSEIF in Leader Score < 60 THEN
UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders_kon" ='Average'; ELSEIF in Leader Score < 80 THEN UPDATE
CHICAGO PUBLIC SCHOOLS SET "Leaders_kon" = 'Strong'; ELSEIF in Leader Score < 100 THEN UPDATE CHICAGO
PUBLIC_SCHOOLS SET "Leaders_kon" = 'Very Strong'; END IF; END

```

#### RUBRIC

Did the learner successfully write the IF statement inside the stored procedure definition? TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or response is incorrect.



1 point

SQL query contains most of the following, but has one line missing.  
 CREATE OR REPLACE PROCEDURE  
 UPDATE\_LEADERS\_SCORE (IN  
 in\_School\_ID INTEGER, IN  
 in\_Leader\_Score INTEGER)  
 LANGUAGE SQL BEGIN UPDATE  
 CHICAGO\_PUBLIC\_SCHOOLS SET  
 "Leaders\_Score" = in\_Leader\_Score  
 WHERE "School\_ID" = in\_School\_ID;  
 IF in\_Leader\_Score > 0 AND  
 in\_Leader\_Score < 20 THEN UPDATE  
 CHICAGO\_PUBLIC\_SCHOOLS SET  
 "Leaders\_Icon" = 'Very Weak';

```
WHERE in_School_ID = "School_ID"
AND in_Leader_Score =
"Leaders_Score";
```

```
ELSEIF in_Leader_Score < 40 THEN
UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Weak';
```

```
WHERE in_School_ID = "School_ID"
AND in_Leader_Score =
"Leaders_Score"; ELSEIF
in_Leader_Score < 60 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Average';
```

```
WHERE in_School_ID = "School_ID"
AND in_Leader_Score =
"Leaders_Score"; ELSEIF
in_Leader_Score < 80 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Strong';
```

```
WHERE in_School_ID = "School_ID"
AND in_Leader_Score =
"Leaders_Score"; ELSEIF
in_Leader_Score < 100 THEN
UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Very Strong'
```

```
WHERE in_School_ID = "School_ID"
AND in_Leader_Score =
"Leaders_Score"; END IF; END@
```



**2 points**



**SQL query is similar to the following:**

```
CREATE OR REPLACE PROCEDURE
UPDATE_LEADERS_SCORE (IN
in_School_ID INTEGER, IN
in_Leader_Score INTEGER)
LANGUAGE SQL BEGIN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Score" = in_Leader_Score
WHERE "School_ID" = in_School_ID;
IF in_Leader_Score > 0 AND
in_Leader_Score < 20 THEN UPDATE
```

```

CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Very Weak';
ELSEIF in_Leader_Score < 40 THEN
UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Weak'; ELSEIF
in_Leader_Score < 60 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Average'; ELSEIF
in_Leader_Score < 80 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Strong'; ELSEIF
in_Leader_Score < 100 THEN
UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Very Strong'; END
IF; END@

```

## PROMPT

### Exercise 3, Question 4:

Run your code to create the stored procedure.

Take a screenshot showing the SQL query and its results. Upload the JPEG (.jpg) file below for your peers to review.

create the stored procedure

```

1  --#SET TERMINATOR @
2  CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE(
3  IN in_School_ID INTEGER, IN in_Leader_Score INTEGER)
4
5  LANGUAGE SQL
6  MODIFIES SQL DATA
7
8  BEGIN
9  UPDATE CHICAGO_PUBLIC_SCHOOLS
10 SET "Leaders_Score" = in_Leader_Score
11 WHERE "School_ID" = in_School_ID;
12 IF in_Leader_Score > 0 AND in_Leader_Score < 20
13 THEN
14 UPDATE CHICAGO_PUBLIC_SCHOOLS
15 SET "Leaders_Icon" = 'Very Weak';
16 ELSEIF in_Leader_Score < 40 THEN
17 UPDATE CHICAGO_PUBLIC_SCHOOLS
18 SET "Leaders_Icon" = 'Weak';
19 ELSEIF in_Leader_Score < 60 THEN
20 UPDATE CHICAGO_PUBLIC_SCHOOLS
21 SET "Leaders_Icon" = 'Average';
22 ELSEIF in_Leader_Score < 80 THEN
23 UPDATE CHICAGO_PUBLIC_SCHOOLS
24 SET "Leaders_Icon" = 'Strong';
25 ELSEIF in_Leader_Score < 100 THEN
26 UPDATE CHICAGO_PUBLIC_SCHOOLS
27 SET "Leaders_Icon" = 'Very Strong';
28 END IF;
29 END

```

✓ CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE( IN in... Run time: 0.121 s

Status: Success | Affected Rows: 0

```

--#SET TERMINATOR @ CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE( IN in School ID INTEGER,
IN in Leader Score INTEGER) LANGUAGE SQL MODIFIES SQL DATA BEGIN UPDATE CHICAGO PUBLIC SCHOOLS
SET "Leaders_Score" = in Leader Score WHERE "School ID" = in School ID; IF in Leader Score > 0 AND in Leader
Score < 20 THEN UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders_Icon" = 'Very Weak; ELSEIF in Leader Score
< 40 THEN UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders_kon" = 'Weak% ELSEIF in Leader Score < 60 THEN
UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders_kon" = 'Average'; ELSEIF in Leader Score < 80 THEN UPDATE
CHICAGO PUBLIC SCHOOLS SET "Leaders_kon" ='Strong'; ELSEIF in Leader Score < 100 THEN UPDATE CHICAGO
PUBLIC_SCHOOLS SET "Leaders_kon" = 'Very Strong'; END IF; END

```

RUBRIC

Did the learner successfully create the stored procedure? TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or response is incorrect.



1 point



**SQL query contains most of the following and the results pane states that the stored procedure was successfully created. CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCORE (IN in\_School\_ID INTEGER, IN in\_Leader\_Score INTEGER) LANGUAGE SQL BEGIN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Score" = in\_Leader\_Score WHERE "School\_ID" = in\_School\_ID; IF in\_Leader\_Score > 0 AND in\_Leader\_Score < 20 THEN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Icon" = 'Very Weak'; ELSEIF in\_Leader\_Score < 40 THEN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Icon" = 'Weak'; ELSEIF in\_Leader\_Score < 60 THEN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Icon" = 'Average'; ELSEIF in\_Leader\_Score < 80 THEN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Icon" = 'Strong'; ELSEIF in\_Leader\_Score < 100 THEN UPDATE CHICAGO\_PUBLIC\_SCHOOLS SET "Leaders\_Icon" = 'Very Strong'; END IF; END@**



2 points

SQL query is correct as follows and the results pane states that the stored procedure was successfully created.

```

CREATE OR REPLACE PROCEDURE
UPDATE_LEADERS_SCORE (IN
in_School_ID INTEGER, IN
in_Leader_Score INTEGER)
LANGUAGE SQL BEGIN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Score" = in_Leader_Score
WHERE "School_ID" = in_School_ID;
IF in_Leader_Score > 0 AND
in_Leader_Score < 20 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Very Weak'; ELSEIF
in_Leader_Score < 40 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Weak'; ELSEIF
in_Leader_Score < 60 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Average'; ELSEIF
in_Leader_Score < 80 THEN UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Strong'; ELSEIF
in_Leader_Score < 100 THEN
UPDATE
CHICAGO_PUBLIC_SCHOOLS SET
"Leaders_Icon" = 'Very Strong'; END IF;
END@

```

## PROMPT

### Exercise 4, Question 1:

Update your stored procedure definition. Add a generic ELSE clause to the IF statement that rolls back the current work if the score did not fit any of the preceding categories.

Take a screenshot showing the SQL query. Upload the JPEG (.jpg) file below for your peers to review.

Update your stored procedure definition. Add a generic ELSE clause to the IF statement

```

CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE(
IN in_School_ID INTEGER, IN in_Leader_Score INTEGER)
LANGUAGE SQL
BEGIN
  UPDATE CHICAGO_PUBLIC_SCHOOLS
  SET "Leaders_Score" = in_Leader_Score
  WHERE "School_ID" = in_School_ID;
  IF in_Leader_Score > 0 AND in_Leader_Score < 20
  THEN
    UPDATE CHICAGO_PUBLIC_SCHOOLS
    SET "Leaders_Icon" = 'Very Weak';
  ELSEIF in_Leader_Score < 40 THEN
    UPDATE CHICAGO_PUBLIC_SCHOOLS
    SET "Leaders_Icon" = 'Weak';
  ELSEIF in_Leader_Score < 60 THEN
    UPDATE CHICAGO_PUBLIC_SCHOOLS
    SET "Leaders_Icon" = 'Average';
  ELSEIF in_Leader_Score < 80 THEN
    UPDATE CHICAGO_PUBLIC_SCHOOLS
    SET "Leaders_Icon" = 'Strong';
  ELSEIF in_Leader_Score < 100 THEN
    UPDATE CHICAGO_PUBLIC_SCHOOLS
    SET "Leaders_Icon" = 'Very Strong';
  ELSE
    ROLLBACK WORK;
  END IF;
END@

```



CREATE OR REPLACE PROCEDURE UPDATE\_LEADERS\_SCOR...

Run time: 0.119 s

Status: **Success** | Affected Rows: **0**

```
CREATE OR REPLACE PROCEDURE UPDATE LEADERS_SCORE( IN in School ID INTEGER, IN in Leader Score
INTEGER) SQL BEGIN UPDATE CHICAGO PUBLIC SCHOOLS SET "Leaders Score" = in Leader _Score WHERE
"School ID" = in School IF in Leader Score > 0 AND in Leader_Score < 20 THEN UPDATE CHICAGO PUBLIC
SCHOOLS SET "Leaders Icon" = 'Very Weak'; ELSEIF in Leader—Score < 40 THEN UPDATE CHICAGO PUBLIC
SCHOOLS SET "Leaders Icon" = 'Weak ELSEIF in Leader—Score < 60 THEN UPDATE CHICAGO PUBLIC_SCHOOLS
SET "Leaders Icon" = 'Average% ELSEIF in Leader—Score < 80 THEN UPDATE CHICAGO PUBLIC_SCHOOLS SET
"Leaders Icon" = 'Strong% ELSEIF in Leader—Score < 100 THEN UPDATE CHICAGO PUBLIC SCHOOLS SET
"Leaders_Icon" = 'Very Strong'; ELSE ROLLBACK WORK; END IF; END @
```

#### RUBRIC

Did the learner correctly add the ROLLBACK WORK statement? TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).



0 points

Did not attempt the problem or response is incorrect.



1 point

**Stored procedure definition now contains a ROLLBACK WORK statement, but not in the correct place.**



2 points

Stored procedure definition now contains an ELSE clause and ROLLBACK WORK before the END IF statement.

#### PROMPT

#### Exercise 4, Question 2:

Update your stored procedure definition again. Add a statement to commit the current unit of work at the end of the procedure.

Take a screenshot showing the SQL query. Upload the JPEG (.jpg) file below for your peers to review.

Updating Stored Procedure

```
--#SET TERMINATOR @
CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE(
IN in_School_ID INTEGER, IN in_Leader_Score INTEGER)
LANGUAGE SQL
BEGIN
UPDATE CHICAGO_PUBLIC_SCHOOLS
SET "Leaders_Score" = in_Leader_Score
WHERE "School_ID" = in_School_ID;
IF in_Leader_Score > 0 AND in_Leader_Score < 20
THEN
UPDATE CHICAGO_PUBLIC_SCHOOLS
SET "Leaders_Icon" = 'Very Weak';
ELSEIF in_Leader_Score < 40 THEN
UPDATE CHICAGO_PUBLIC_SCHOOLS
SET "Leaders_Icon" = 'Weak';
ELSEIF in_Leader_Score < 60 THEN
UPDATE CHICAGO_PUBLIC_SCHOOLS
SET "Leaders_Icon" = 'Average';
ELSEIF in_Leader_Score < 80 THEN
UPDATE CHICAGO_PUBLIC_SCHOOLS
SET "Leaders_Icon" = 'Strong';
ELSEIF in_Leader_Score < 100 THEN
UPDATE CHICAGO_PUBLIC_SCHOOLS
SET "Leaders_Icon" = 'Very Strong';
ELSE
ROLLBACK WORK;
END IF;
COMMIT WORK;
END @
```

✓ **CREATE OR REPLACE PROCEDURE UPDA...** Run time: 0.121 s

Status: **Success** | Affected Rows: **0**

```
--#SET TERMINATOR @ CREATE OR REPLACE PROCEDURE UPDATE_LEADERS_SCORE( IN in School ID INTEGER,
N in Leader Score INTEGER)LANGUAGE SQLBEGIN UPDATE CHICAGO PUBLIC_SCHOOLS SET "Leaders Score" = in
Leader Score WHERE "School_ID" = in School ID; IF in Leader Score > 0 AND in Leader Score < 20 THEN
UPDATE CHICAGO PUBLIC SCHOOLS SET "Leaders Icon" = 'Very Weak% ELSEIF in LeaderScore < 40 THEN
UPDATE CHICAGO PUBLIC SCHOOLS SET "Leaders Icon" = 'Weak ELSEIF in Leader—Score < 60 THEN UPDATE
CHICAGO PUBLIC_SCHOOLS SET "Leaders Icon" = 'Average% ELSEIF in Leader—Score < 80 THEN UPDATE
CHICAGO PUBLIC_SCHOOLS SET "Leaders Icon" = 'Strong% ELSEIF in Leader—Score < 100 THEN UPDATE
CHICAGO PUBLIC SCHOOLS SET "Leaders_Icon" = 'Very Strong'; ELSE ROLLBACK WORK; END IF; COMMIT WORK;
END @
```

## RUBRIC

Did the learner correctly add the COMMIT WORK statement? TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).

- ☐ 0 points  
 Did not attempt the problem or response is incorrect.
- ☐ 1 point  
 Stored procedure definition now contains a COMMIT WORK statement, but not in the correct place.
- ☒ 2 points  
 Stored procedure definition now contains a COMMIT WORK statement after the END IF statement.