*Edson Sanchez* CIT/ITI-2180 Foundations of Data and Database Management

**12-1**

SELECT

title,

retail

FROM

books

WHERE

retail < (

SELECT

AVG(retail)

FROM

books

);

TITLE RETAIL

BODYBUILD IN 10 MINUTES A DAY 30.95

REVENGE OF MICKEY 22

COOKING WITH MUSHROOMS 19.95

HANDCRANKED COMPUTERS 25

THE WOK WAY TO COOK 28.75

BIG BEAR AND LITTLE DOVE 8.95

HOW TO GET FASTER PIZZA 29.95

HOW TO MANAGE THE MANAGER 31.95

SHORTEST POEMS 39.95

9 rows selected.

**12-2**

SELECT

title,

cost,

b.category

FROM

books b,

(

SELECT

category,

AVG(cost) avgcat

FROM

books

GROUP BY

category

) c

WHERE

b.category = c.category

AND b.cost < c.avgcat

ORDER BY

category;

TITLE COST CATEGORY

BIG BEAR AND LITTLE DOVE 5.32 CHILDREN

DATABASE IMPLEMENTATION 31.4 COMPUTER

HANDCRANKED COMPUTERS 21.8 COMPUTER

COOKING WITH MUSHROOMS 12.5 COOKING

REVENGE OF MICKEY 14.2 FAMILY LIFE

**12-3**

SELECT

order#,

shipstate

FROM

orders

WHERE

shipstate = (

SELECT

shipstate

FROM

orders

WHERE

order# = 1014

);

ORDER# SHIPSTATE

1007 TX

1014 TX

**12-4**

SELECT

order#

FROM

orderitems

GROUP BY

order#

HAVING

SUM(quantity \* paideach) > (

SELECT

SUM(quantity \* paideach)

FROM

orderitems

WHERE

order# = 1008

);

ORDER#

1001

1002

1003

1004

1005

1006

1007

1009

1010

1011

1012

1013

1014

1016

1018

15 rows selected.

**12-5**

SELECT

lname || ', ' || fname "AUTHOR",

title

FROM

books

JOIN bookauthor USING ( isbn )

JOIN author USING ( authorid )

WHERE

isbn IN (

SELECT

isbn

FROM

orderitems

GROUP BY

isbn

HAVING

COUNT(\*) = (

SELECT

MAX(COUNT(\*) )

FROM

orderitems

GROUP BY

isbn

)

);

AUTHOR TITLE

BAKER, JACK COOKING WITH MUSHROOMS

**13-5 (notice this is chapter 13 number 5)**

CREATE VIEW reorderinfo AS

SELECT

isbn,

title,

contact,

phone

FROM

books

JOIN publisher USING ( pubid );

View REORDERINFO created.

**13-7**

UPDATE reorderinfo

SET

isbn = '0123456789'

WHERE

isbn = '0401140733';

Error starting at line : 1 in command -

UPDATE reorderinfo

SET

isbn = '0123456789'

WHERE

isbn = '0401140733'

Error report -

ORA-02292: integrity constraint (ERSANCHEZ.ORDERITEMS\_ISBN\_FK) violated - child record found

This throws an error because we try and change the ISBN that is stored in the BOOKS table while leaving the foreign key ISBN in the ORDERITEMS table unchanged. Therefore the constraint that primary keys and foreign keys must be the same value is violated.

**13-8**

DELETE FROM reorderinfo

WHERE

contact = 'TOMMIE SEYMOUR';

Error starting at line : 1 in command -

DELETE FROM reorderinfo

WHERE

contact = 'TOMMIE SEYMOUR'

Error report -

ORA-02292: integrity constraint (ERSANCHEZ.ORDERITEMS\_ISBN\_FK) violated - child record found

This error is similar to the last one because the constraint that is violated is the one of the foreign key. The ISBN cannot be deleted from the BOOKS table since the ORDERITEMS table ISBN is linked to it.

**Not-in-book #1**

CREATE VIEW full\_orders AS

SELECT

\*

FROM

customers

JOIN orders USING ( customer# )

JOIN orderitems USING ( order# )

WITH READ ONLY;

View FULL\_ORDERS created.

**Not-in-book #2**

SELECT

firstname

|| ' '

|| lastname customer,

order#,

SUM(paideach \* quantity) total

FROM

full\_orders

GROUP BY

order#,

firstname,

lastname,

order#

ORDER BY

SUM(paideach \* quantity) desc;

CUSTOMER ORDER# TOTAL

TAMMY GIANA 1007 335.85

KENNETH FALAH 1004 170.9

BECCA NELSON 1012 166.4

JAKE LUCAS 1001 117.4

REESE MCGOVERN 1002 111.9

BONITA MORALES 1003 106.85

LEILA SMITH 1016 85.45

JAKE LUCAS 1011 85.45

BONITA MORALES 1018 75.9

JASMINE LEE 1013 55.95

JENNIFER SMITH 1010 55.95

LEILA SMITH 1006 54.5

TAMMY GIANA 1014 44

CINDY GIRARD 1009 41.95

GREG MONTIASA 1005 39.95

THOMAS PIERSON 1008 39.9

GREG MONTIASA 1019 22

CINDY GIRARD 1000 19.95

KENNETH JONES 1020 19.95

KENNETH FALAH 1015 19.95

STEVE SCHELL 1017 17.9

21 rows selected.