*Gabriel Nestor* ITI-2180 Foundations of Data and Database Management

**Problem A**

**CODE:**

SELECT COUNT(ISBN)

FROM BOOKS

WHERE CATEGORY = 'COOKING';

**OUTPUT:**

COUNT(ISBN)

-----------

2

**Problem B**

**CODE:**

SELECT COUNT(ISBN)

FROM BOOKS

WHERE RETAIL > 30;

**OUTPUT:**

COUNT(ISBN)

-----------

8

**Problem C**

**CODE:**

SELECT MAX(PUBDATE)

FROM BOOKS NATURAL JOIN ORDERITEMS

WHERE ORDER# IS NOT NULL;

**OUTPUT:**

MAX(PUBDA

---------

01-MAR-16

**Problem D**

**CODE:**

SELECT SUM((QUANTITY\*PAIDEACH)-(QUANTITY\*COST))

FROM BOOKS NATURAL JOIN ORDERITEMS NATURAL JOIN ORDERS

WHERE CUSTOMER# = 1017;

**OUTPUT:**

SUM((QUANTITY\*PAIDEACH)-(QUANTITY\*COST))

----------------------------------------

55.28

**Problem E**

**CODE:**

SELECT MIN(RETAIL)

FROM BOOKS

WHERE CATEGORY = 'COMPUTER';

**OUTPUT:**

MIN(RETAIL)

-----------

25

**Problem F**

**CODE:**

SELECT AVG(SUM(PAIDEACH-COST)) AVERAGE\_PROFIT

FROM BOOKS JOIN ORDERITEMS USING (ISBN)

GROUP BY ORDER#

**OUTPUT:**

AVERAGE\_PROFIT

--------------

25.5685714

**Problem G**

**CODE:**

SELECT CUSTOMER#, COUNT(ORDER#)

FROM ORDERS

GROUP BY CUSTOMER#

HAVING MIN(ORDERDATE) > '31-MAR-19'

ORDER BY CUSTOMER#;

**OUTPUT:**

CUSTOMER# COUNT(ORDER#)

---------- -------------

1001 2

1003 2

1004 1

1007 2

1008 1

1014 1

1015 1

1017 1

1018 2

1019 1

1020 2

11 rows selected.

**Problem H**

**CODE:**

SELECT NAME, AVG(RETAIL)

FROM PUBLISHER NATURAL JOIN BOOKS

GROUP BY NAME

HAVING AVG(RETAIL) > 50

ORDER BY NAME;

**OUTPUT:**

NAME AVG(RETAIL)

----------------------- -----------

AMERICAN PUBLISHING 52.3

PUBLISH OUR WAY 57.225

**Problem I**

**CODE:**

SELECT DISTINCT FIRSTNAME, LASTNAME, STATE, ORDER#, SUM(QUANTITY\*PAIDEACH) TOTAL

FROM CUSTOMERS NATURAL JOIN ORDERS NATURAL JOIN ORDERITEMS

GROUP BY GROUPING SETS ((FIRSTNAME, LASTNAME, STATE, ORDER#))

HAVING (SUM(QUANTITY\*PAIDEACH) > 70) AND STATE IN ('NJ', 'GA')

**OUTPUT:**

FIRSTNAME LASTNAME ST ORDER# TOTAL

---------- ---------- -- ---------- ----------

JAKE LUCAS GA 1001 117.4

KENNETH FALAH NJ 1004 170.9

JAKE LUCAS GA 1011 85.45

**Problem J**

**CODE:**

SELECT NAME, MAX(RETAIL)

FROM PUBLISHER NATURAL JOIN BOOKS

GROUP BY (NAME)

HAVING NAME = 'AMERICAN PUBLISHING'

**OUTPUT:**

NAME MAX(RETAIL)

----------------------- -----------

AMERICAN PUBLISHING 75.95