

CSC 331

PROJECT #3

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1. Identify the medication history of Aquila Todd. Display the patient name, parent names, physician, drug, date of prescription and dosage. Order chronologically by date.

```

SELECT C.CH_FNAME, C.CH_LNAME, G.G_FNAME, G_LNAME, P.STAFF_FNAME,
P.STAFF_LNAME, D.GENERIC_NAME, PRES.PRESCRIPTION_DATE, D.DOSAGEFROM
PRESCRIPTIONS PRES, CHILD_PATIENT C, GUARDIAN G, PHAR_STAFF P, DRUGS D
, GUAR_CHILD GC
WHERE (C.CH_FNAME = 'Aquila' AND C.CH_LNAME = 'Todd') AND DPRES.CH_ID =
C.CH_ID AND P.STAFF_ID = PRES.STAFF_ID AND GC.CH_ID = PRES.CH_ID AND
D.DRUG_ID = PRES.DRUG_ID
ORDER BY PRES.PRESCRIPTION_DATE

```

CH_FNAME	CH_LNAME	STAFF_FNAME	STAFF_LNAME	PRESCRIPTION_DATE	G_FNAME	G_LNAME	GENERIC_NAME
Aquila	Todd	Carl	Farmer	6/25/2015	Len	Buttler	Ampicillin
Aquila	Todd	Carl	Farmer	6/26/2014	Len	Buttler	Ampicillin

2. Identify child patients without parents in the database. Display the child patient name. Use a nested select to answer this question.

```

SELECT CH_FNAME, CH_LNAME
FROM CHILD_PATIENT
WHERE CH_ID NOT IN ( SELECT CH_ID
FROM GUAR_CHILD

```

PATIENT_FNAME	PATIENT_LNAME
Martena	Callahan
Jolie	Mccall

3. Identify pharmacy staff that dispensed the most prescriptions in the last year. Display the pharmacy staff name, store address and number of medications. Display one row for each pharmacy staff. The staff with the most medications will be displayed first. Use a nested select to answer this question.

- 4. Identify pharmacies with more than three staff. Display the store name and number of staff. Display one row for each store. The store with the most staff will be displayed first.**

```
SELECT P.PHAR_NAME, COUNT(P.PHAR_ID) AS "EMPLOYEES"
FROM PHARMACIES P, PHAR_STAFF PS
WHERE PS.PHAR_ID = P.PHAR_ID
GROUP BY P.PHAR_NAME
ORDER BY 2 DESC
```

PHAR_NAME	EMPL OYEE S
CVS Health corporation sales	3
Walgreens	1
Rite Aid stores	1
WALMART	3
Target	1

- 5. Identify stores with the most sales in 2016. Display one row for each store. Display the store address, city, total revenue, smallest sale and largest sale. Use functions to answer this question. The store with the highest revenue will display first.**

```
SELECT P.PHAR_ADDRESS, P.PHAR_CITY, SUM(PRICE) AS "TOTAL" , MAX(PRICE), MIN(PRICE)
FROM PHARMACIES P, DRUGS D, PRESCRIPTIONS PRES
WHERE D.DRUG_ID = PRES.DRUG_ID AND P.PHAR_ID = PRES.PHAR_ID
GROUP BY P.PHAR_ADDRESS, P.PHAR_CITY
ORDER BY 3 DESC
```

PHAR_ADDRESS	PHAR_CITY	TOTAL	MAX(PRICE)	MIN(PRICE)
P.O. Box 773, 6365 Scelerisque Road	Tucson	132	50	12

742-9798 Eget Street	Tuscaloosa	520	250	25
P.O. Box 440, 4704 Parturient Av.	Saint Louis	520	100	20
8760 Ornare, Street	Bloomington	320	200	30
41-06 Angel BVLD	Owensboro	100	100	100

- 6. Increase the price of Oxacillin by 70 % at all stores. Identify the SQL commands to perform this operation.**

```
UPDATE TABLE DRUGS
SET PRICE = PRICE +PRICE *.70
WHERE GENERIC_NAME = 'Oxacillin'
```

- 7. The pharmacist doesn't know how to spell a drug name, but the first few letters are pip. Identify all drugs with a similar spelling. Display the brand name, generic name and dosage.**

```
SELECT BRAND_NAME, GENERIC_NAME , DOSAGE
FROM DRUGS
WHERE GENERIC_NAME LIKE 'PIP%'
```

BRAND_NAME	GENERIC_NAME	DOSAGE
Piperacillin	Pipracil	300 mg per day

- 8. The drug Piperacillin will no longer be sold at all stores. What is the best process to implement. Identify the SQL commands to perform this operation.**

```
ALTER TABLE DRUGS
ADD STATUS VARCHAR(10)
```

```
UPDATE TABLE DRUGS
SET STATUS = 'INACTIVE'
WHERE GENERIC_NAME = 'Piperacillin'
```

9. In one SQL window, change the staff salary for record 1. Don't commit. In another SQL window, change the staff salary for record 1. Don't commit. Resolve the problem. Disable the auto commit flag at the top of the windows before performing this operation. Explain your results

There must be a commit since in one window has exclusive access to the row therefore in order to fix this by doing a commit it will release the write lock in that row

10. In one SQL window, delete all drugs. Don't commit. In another SQL window, increase the price of all drugs by 5%. Don't commit. Explain your results. Resolve the problem. Create a backup of your table before implementing. To create a backup table, enter `CREATE TABLE AS SELECT * FROM ; COMMIT;` Then you can rename a table using the `RENAME TABLE` commit. Disable the auto commit flag at the top of the windows before performing this operation

Since the first window made the changes in the data the whole table has exclusive access. If commit then the second session is allow acces to the table. The solution for this we delete in one window or update in the other but cant do both

11. In one SQL window, null all patient addresses. Don't commit. In another SQL window, null all patient allergies. Don't commit. Quit both Oracle sessions. Login to Oracle and search for this information. Explain your results. Disable the auto commit flag at the top of the windows before performing this operation.

The data will be there since the sessions didn't end and we didn't commit therefore the data is not affected

12. Use the SQL DESCRIBE operation to list the table structure for all tables.

DESC PRESCRIPTIONS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>PRESCRIPTIONS</u>	<u>PRESCRIPTION_ID</u>	NUMBER	22	-	-	1	-	-	-
	<u>PRE_ID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>PATIENT_ID</u>	NUMBER	22	-	-	-	✓	-	-

	<u>PRESCRIPTION_DATE</u>	DATE	7	-	-	-	-	-	-
	<u>DRUG_ID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>PHAR_ID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>STAFF_ID</u>	NUMBER	22	-	-	-	✓	-	-
	<u>CH_ID</u>	NUMBER	22	-	-	-	✓	-	-

desc DRUGS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>DRUGS</u>	<u>DRUG_ID</u>	NUMBER	22	-	-	1	-	-	-
	<u>GENERIC_NAME</u>	VARCHAR2	40	-	-	-	✓	-	-
	<u>BRAND_NAME</u>	VARCHAR2	40	-	-	-	✓	-	-
	<u>DOSAGE</u>	VARCHAR2	60	-	-	-	-	-	-
	<u>PRICE</u>	NUMBER	22	-	-	-	✓	-	-

```
CREATE TABLE CHILD_PATIENT
(CH_ID NUMBER PRIMARY KEY NOT NULL,
CH_FNAME VARCHAR(15),
CH_LNAME VARCHAR(15),
CH_EMAIL VARCHAR(60),
CH_ADDRESS VARCHAR(50),
CH_CITY VARCHAR(30),
CH_ZIPCODE VARCHAR(5),
CH_STATE VARCHAR(2),
```

PHAR_ID NUMBER, FOREIGN KEY(PHAR_ID) references PHARMACIES(PHAR_ID)

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>CHILD_PATIENT</u>	<u>CH_ID</u>	NUMBER	22	-	-	1	-	-	-
	<u>CH_FNAME</u>	VARCHAR2	15	-	-	-	✓	-	-
	<u>CH_LNAME</u>	VARCHAR2	15	-	-	-	✓	-	-
	<u>CH_EMAIL</u>	VARCHAR2	60	-	-	-	✓	-	-
	<u>CH_ADDRESS</u>	VARCHAR2	50	-	-	-	✓	-	-
	<u>CH_CITY</u>	VARCHAR2	30	-	-	-	✓	-	-
	<u>CH_ZIPCODE</u>	VARCHAR2	5	-	-	-	✓	-	-
	<u>CH_STATE</u>	VARCHAR2	2	-	-	-	✓	-	-
	<u>PHAR_ID</u>	NUMBER	22	-	-	-	✓	-	-

CREATE TABLE GUAR_CHILD

(G_ID NUMBER,

CH_ID NUMBER,

FOREIGN KEY(G_ID) REFERENCES GUARDIAN(G_ID),

FOREIGN KEY(CH_ID) REFERENCES CHILD_PATIENT(CH_ID));

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>GUAR_CHILD</u>	<u>G_ID</u>	NUMBER	22	-	-	-	✓	-	-

	<u>CH_ID</u>	NUMBER	22	-	-	-	✓	-	-
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CREATE TABLE GUARDIAN
(G_ID NUMBER PRIMARY KEY NOT NULL,
G_FNAME VARCHAR(15),
G_LNAME VARCHAR(15),
G_EMAIL VARCHAR(60),
G_ADDRESS VARCHAR(50),
G_CITY VARCHAR(30),
G_ZIPCODE VARCHAR(5),
G_STATE VARCHAR(2),
G_PHONE CHAR(10))

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>GUARDIAN</u>	<u>G_ID</u>	NUMBER	22	-	-	1	-	-	-
	<u>G_FNAME</u>	VARCHAR2	15	-	-	-	✓	-	-
	<u>G_LNAME</u>	VARCHAR2	15	-	-	-	✓	-	-
	<u>G_EMAIL</u>	VARCHAR2	60	-	-	-	✓	-	-
	<u>G_ADDRESS</u>	VARCHAR2	50	-	-	-	✓	-	-
	<u>G_CITY</u>	VARCHAR2	30	-	-	-	✓	-	-
	<u>G_ZIPCODE</u>	VARCHAR2	5	-	-	-	✓	-	-
	<u>G_STATE</u>	VARCHAR2	2	-	-	-	✓	-	-
	<u>G_PHONE</u>	CHAR	10	-	-	-	✓	-	-


```
CREATE TABLE PHAR_STAFF
(STAFF_ID NUMBER PRIMARY KEY NOT NULL,
STAFF_FNAME VARCHAR(15),
STAFF_LNAME VARCHAR(15),
STAFF_EMAIL VARCHAR(60),
STAFF_ADDRESS VARCHAR(50),
STAFF_CITY VARCHAR(30),
STAFF_ZIPCODE VARCHAR(5),
STAFF_STATE VARCHAR(2),
STAFF_HIREDATE DATE,
STAFF_TITLE VARCHAR(30),
STAFF_SALARY DECIMAL(7,2),
PHAR_ID NUMBER,
FOREIGN KEY(PHAR_ID) references PHARMACIES(PHAR_ID))
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PHAR_STAFF	STAFF_ID	NUMBER	22	-	-	1	-	-	-
	STAFF_FNAME	VARCHAR2	15	-	-	-	✓	-	-
	STAFF_LNAME	VARCHAR2	15	-	-	-	✓	-	-
	STAFF_EMAIL	VARCHAR2	60	-	-	-	✓	-	-
	STAFF_ADDRESS	VARCHAR2	50	-	-	-	✓	-	-
	STAFF_CITY	VARCHAR2	30	-	-	-	✓	-	-
	STAFF_ZIPCODE	VARCHAR2	5	-	-	-	✓	-	-
	STAFF_STATE	VARCHAR2	2	-	-	-	✓	-	-
	STAFF_HIREDATE	DATE	7	-	-	-	✓	-	-

	<u>STAFF_TITLE</u>	VARCHAR2	30	-	-	-	✓	-	-
	<u>STAFF_SALARY</u>	NUMBER	-	7	2	-	✓	-	-
	<u>PHAR_ID</u>	NUMBER	22	-	-	-	✓	-	-