

CIS-310 Database Design
Assignment #7
40 points

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After you have successfully completed Assignment 4, the Premiere Products database containing five tables (REP, CUSTOMER, ORDERS, PART, and ORDER_LINE) populated with the data and the entity relationship diagram (ERD) should already be in your SQL Server account. You will also find the five database tables at the end of this document.

IMPORTANT NOTE: Several students in the class have not submitted Assignment 4. These students have to run the script given in Assignment 4 to create and populate the Premiere Products database and the ERD now to be able to complete this Assignment (due by Sun, Oct 24). See the Assignments/Assignments/Assignment 4 folder. In Assignment 7 you will be working with the same Premiere Products database again.

Using the Premiere Products database write the SQL queries for the following problems. Save the eight queries in a single SQL file or in eight separate files in your account on J drive. Paste your queries and the outputs they generated after each of the eight problems.

After you paste the queries and the output save this document as Word or pdf file named Assignment7_YourFirstName_YourLastName and submit via Blackboard. See the Assignments/Assignments/Assignment 7 folder.

Problem 1. List all rows and columns for the complete ORDERS table. Paste the query and the output below.

```
SELECT *  
FROM dbo.ORDERS;
```

Results		Messages	
	ORDER_NUM	ORDER_DATE	CUSTOMER_NUM
1	21608	2020-10-20 00:00:00.000	148
2	21610	2020-10-20 00:00:00.000	356
3	21613	2020-10-21 00:00:00.000	408
4	21614	2020-10-21 00:00:00.000	282
5	21617	2020-10-23 00:00:00.000	608
6	21619	2020-10-23 00:00:00.000	148
7	21623	2020-10-23 00:00:00.000	608

Problem 2. List the part number and part description of each part that is not in item class AP. Paste the query and the output below.

```
SELECT PART_NUM, DESCRIPTION  
FROM dbo.PART  
WHERE CLASS != 'AP';
```

Results Messages		
	PART_NUM	DESCRIPTION
1	AT94	Iron
2	BV06	Home Gym
3	DL71	Cordless Drill
4	FD21	Stand Mixer
5	KV29	Treadmill

Problem 3. List the part number, description, and number of units on hand for each part that has between 10 and 25 units on hand, including booth 10 and 25. We can do this in two ways. Paste the query and the output below.

```
SELECT PART_NUM, DESCRIPTION, ON_HAND
FROM dbo.PART
WHERE ON_HAND >= 10 AND ON_HAND <= 25;
```

Results Messages			
	PART_NUM	DESCRIPTION	ON_HAND
1	DL71	Cordless Drill	21
2	DW11	Washer	12
3	FD21	Stand Mixer	22
4	KL62	Dryer	12

Problem 4. List all details about all parts. Order the output by part description. Paste the query and the output below.

```
SELECT PART_NUM, DESCRIPTION, ON_HAND, CLASS, WAREHOUSE, PRICE
FROM dbo.PART
ORDER BY DESCRIPTION;
```

Results Messages						
	PART_NUM	DESCRIPTION	ON_HAND	CLASS	WAREHOUSE	PRICE
1	DL71	Cordless Drill	21	HW	3	129.95
2	KT03	Dishwasher	8	AP	3	595.00
3	KL62	Dryer	12	AP	1	349.95
4	DR93	Gas Range	8	AP	2	495.00
5	BV06	Home Gym	45	SG	2	794.95
6	AT94	Iron	50	HW	3	24.95
7	CD52	Microwave Oven	32	AP	1	165.00
8	FD21	Stand Mixer	22	HW	3	159.95
9	KV29	Treadmill	9	SG	2	1390.00
10	DW11	Washer	12	AP	3	399.99

Problem 5. List the part number, part description, and on-hand value of each part whose number of units on hand is more than the average number of units on hand for all parts. (Hint: Use a subquery or a nested query.). Paste the query and the output below.

```
SELECT PART_NUM, DESCRIPTION, ON_HAND
FROM dbo.PART
```

WHERE ON_HAND > (SELECT AVG(ON_HAND) FROM PART);

	PART_NUM	DESCRIPTION	ON_HAND
1	AT94	Iron	50
2	BV06	Home Gym	45
3	CD52	Microwave Oven	32
4	FD21	Stand Mixer	22

Problem 6. What is the part number, description, and price of the least expensive part in the database? (Hint: Use a subquery, a nested query.). Paste the query and the output below.

```
SELECT PART_NUM, DESCRIPTION, PRICE
FROM dbo.PART
WHERE PRICE = (SELECT MIN(PRICE) FROM dbo.PART);
```

	PART_NUM	DESCRIPTION	PRICE
1	AT94	Iron	24.95

Problem 7. List the sum of the balances of all customers for each sales rep. Order and group the results by sales rep number. Paste the query and the output below.

```
SELECT REP_NUM, SUM(BALANCE) AS SUM_BALANCE
FROM dbo.CUSTOMER
GROUP BY REP_NUM
ORDER BY REP_NUM;
```

	SUM_BALANCE	REP_NUM
1	27533.00	20
2	8815.75	35
3	11303.00	65

Problem 8. For each part, list the part number, description, units on hand, order number, and number of units. All parts should be included in the results. For those parts that are currently not on order, the order number and number of units ordered should be left blank. Order the results by part number. Paste the query and the output below.

```
SELECT dbo.PART.PART_NUM, DESCRIPTION, ON_HAND, ORDER_NUM,
NUM_ORDERED
FROM dbo.PART
LEFT JOIN dbo.ORDER_LINE ON dbo.PART_NUM = dbo.ORDER_LINE.PART_NUM
ORDER BY PART_NUM;
```

Results		Messages			
	PART_NUM	DESCRIPTION	ON_HAND	ORDER_NUM	NUM_ORDERED
1	AT94	Iron	50	21608	11
2	BV06	Home Gym	45	21617	2
3	CD52	Microwave Oven	32	21617	4
4	DL71	Cordless Drill	21	NULL	NULL
5	DR93	Gas Range	8	21610	1
6	DR93	Gas Range	8	21619	1
7	DW11	Washer	12	21610	1
8	FD21	Stand Mixer	22	NULL	NULL
9	KL62	Dryer	12	21613	4
10	KT03	Dishwasher	8	21614	2
11	KV29	Treadmill	9	21623	2

PREMIERE PRODUCTS SCHEMA

TABLE REP

	REP_NUM	LAST_NAME	FIRST_NAME	STREET	CITY	STATE	ZIP	COMMISSION	RATE
1	20	Kaiser	Valerie	624 Randall	Grove	FL	33321	20542.50	0.05
2	35	Hull	Richard	532 Jackson	Sheldon	FL	33553	39216.00	0.07
3	65	Perez	Juan	1626 Taylor	Fillmore	FL	33336	23487.00	0.05

TABLE CUSTOMER

	CUSTOMER_NUM	CUSTOMER_NAME	STREET	CITY	STATE	ZIP	BALANCE	CREDIT_LIMIT	REP_NUM
1	148	Al's Appliance and Sport	2837 Greenway	Fillmore	FL	33336	6550.00	7500.00	20
2	282	Brookings Direct	3827 Devon	Grove	FL	33321	431.50	10000.00	35
3	356	Ferguson's	382 Wildwood	Northfield	FL	33146	5785.25	7500.00	65
4	408	The Everything Shop	1828 Raven	Crystal	FL	33503	5285.25	5000.00	35
5	462	Bargains Galore	3829 Central	Grove	FL	33321	3412.00	10000.00	65
6	524	Kline's	838 Ridgeland	Fillmore	FL	33336	12762.00	15000.00	20
7	608	Johnson's Department Store	372 Oxford	Sheldon	FL	33553	2106.00	10000.00	65
8	687	Lee's Sport and Appliance	282 Evergreen	Altonville	FL	32543	2851.00	5000.00	35
9	725	Deerfield's Four Seasons	282 Columbia	Sheldon	FL	33553	248.00	7500.00	35
10	842	All Season	28 Lakeview	Grove	FL	33321	8221.00	7500.00	20

TABLE ORDERS

	ORDER_NUM	ORDER_DATE	CUSTOMER_NUM
1	21608	2020-10-20 00:00:00.000	148
2	21610	2020-10-20 00:00:00.000	356
3	21613	2020-10-21 00:00:00.000	408
4	21614	2020-10-21 00:00:00.000	282
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6	21619	2020-10-23 00:00:00.000	148
7	21623	2020-10-23 00:00:00.000	608

TABLE PART

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	WAREHOUSE	PRICE
1	AT94	Iron	50	HW	3	24.95
2	BV06	Home Gym	45	SG	2	794.95
3	CD52	Microwave Oven	32	AP	1	165.00
4	DL71	Cordless Drill	21	HW	3	129.95
5	DR93	Gas Range	8	AP	2	495.00
6	DW11	Washer	12	AP	3	399.99
7	FD21	Stand Mixer	22	HW	3	159.95
8	KL62	Dryer	12	AP	1	349.95
9	KT03	Dishwasher	8	AP	3	595.00
10	KV29	Treadmill	9	SG	2	1390.00

TABLE ORDER_LINE

	ORDER_NUM	PART_NUM	NUM_ORDERED	QUOTED_PRICE
1	21608	AT94	11	21.95
2	21610	DR93	1	495.00
3	21610	DW11	1	399.99
4	21613	KL62	4	329.95
5	21614	KT03	2	595.00
6	21617	BV06	2	794.95
7	21617	CD52	4	150.00
8	21619	DR93	1	495.00
9	21623	KV29	2	1290.00