CIS-310 Database Design
Small Group Activity #7
30 points

Names of group members: _____

_____

1. Get in touch with your group. (See Groups folder on Blackboard.)
2. Discuss and complete the assignment together via E-mail, Discussion Forum, Blackboard Collaborate Ultra, and/or MS Teams.
3. Choose a recorder to prepare the final copy (one per group) and submit it via the Blackboard Assignments/Small Group Activities folder to the instructor.
4. Be sure all group members' names are on final copy. Do not add names of your group classmates who did not participate in the assignment.

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 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 Small Group Activity (due by Thu, Oct 20) and Assignment 7 (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.

Using the Premiere Products database write the SQL queries for the following eight problems. Discuss each of the eight problems with your group, write a query for each problem, and run the query on SQL server. Save the eight queries in a single file or in eight separate files in your account on J drive. Every group member should run each of the eight queries and save them in his/her 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 they produced save this document as Word or pdf file named SGA7_Groupxx, where xx stand for the group number and submit via Blackboard. See the Assignments/Small Group Activities/Small Group Activity 7 folder.

Problem 1. List the part number, description, and price for all parts. Paste your query and the output below.

SECLECT PART_NUM, DESCRIPTION, PRICE
FROM dbo.PART.

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

Problem 2. List the names of customers with credit limits of $10,000 or more. Paste your query and the output below.

SELECT CUSTOMER_NAME
FROM dbo.CUSTOMER
WHERE CREDIT_LIMIT>=10000;

	CUSTOMER_NAME
1	Brookings Direct
2	Bargains Galore
3	Kline's
4	Johnson's Department Store

Problem 3. List the number and name of each customer represented by sales rep 35 or sales rep 65. Paste your query and the output below.

SELECT CUSTOMER_NUM, CUSTOMER_NAME
FROM dbo.CUSTOMER
WHERE REP_NUM = 35 OR REP_NUM =65;

	CUSTOMER_NUM	CUSTOMER_NAME
1	282	Brookings Direct
2	356	Ferguson's
3	408	The Everything Shop
4	462	Bargains Galore
5	608	Johnson's Department Store
6	687	Lee's Sport and Appliance
7	725	Deerfield's Four Seasons

Problem 4. List the part number, part description, and on-hand value (units on hand * unit price) for each part whose on-hand value is at least $7,500. Assign the name ON_HAND_VALUE to the computed column. Paste your query and the output below.

SELECT PART_NUM, DESCRIPTION, ON_HAND*PRICE AS ON_HAND_VALUE
FROM dbo.PART
WHERE ON_HAND*PRICE>=7500;

	PART_NUM	DESCRIPTION	ON_HAND_VALUE
1	BV06	Home Gym	35772.75
2	KV29	Treadmill	12510.00

Problem 5. List all details about all parts. Order the output by part number within warehouse. (That is order the output by warehouse and then by part number.) Paste your query and the output below.

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

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

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 your 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 names and credit limit of all customers whose credit limit is less than the average credit limit for all customers. Use one nested query. Paste your query and the output below.

SELECT CUSTOMER_NAME, CREDIT_LIMIT
FROM dbo.CUSTOMER
WHERE CREDIT_LIMIT < (SELECT AVG(CREDIT_LIMIT) FROM dbo.CUSTOMER);

	CUSTOMER_NAME	CREDIT_LIMIT
1	Al's Appliance and Sport	7500.00
2	Ferguson's	7500.00
3	The Everything Shop	5000.00
4	Lee's Sport and Appliance	5000.00
5	Deerfield's Four Seasons	7500.00
6	All Season	7500.00

Problem 8. For each order, list the order number and order date along with the number and name of the customer that placed the order. Paste your query and the output below.

SELECT ORDER_NUM, ORDER_DATE, CUSTOMER_NUM, CUSTOMER_NAME
FROM dbo.ORDERS
JOIN dbo. CUSTOMER ON dbo.CUSTOMER. CUSTOMER_NUM = dbo.ORDERS. CUSTOMER_NUM

Results | **Messages**

	ORDER_NUM	ORDER_DATE	CUSTOMER_NUM	CUSTOMER_NAME
1	21608	2020-10-20 00:00:00.000	148	Al's Appliance and Sport
2	21610	2020-10-20 00:00:00.000	356	Ferguson's
3	21613	2020-10-21 00:00:00.000	408	The Everything Shop
4	21614	2020-10-21 00:00:00.000	282	Brookings Direct
5	21617	2020-10-23 00:00:00.000	608	Johnson's Department Store
6	21619	2020-10-23 00:00:00.000	148	Al's Appliance and Sport
7	21623	2020-10-23 00:00:00.000	608	Johnson's Department Store

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	5785.00	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
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

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