

CIS-310 Database Design
Small Group Activity #9
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.

Discuss each of the 11 problems with your group, write an SQL code for each problem, and run the code on SQL server. Save the code in a single file in your account on J drive. Every group member should run the code for each problem and save the code in his/her account on J drive. Paste your code after the description of each problem and the output from the SELECT statement to show that the change was made correctly.

After you paste the queries and the output they produced save this document as Word or pdf file named SGA9_Groupxx, where xx stand for the group number and submit via Blackboard. See the Assignments/Small Group Activities/Small Group Activity 9 folder.

Problem 1.

Use the following information to create a new table named NON_SP_GOOD.

Column	Type	Length	Decimal Places	Nulls Allowed?	Description
PART_NUM	CHAR	4		No	Part number (PK)
DESCRIPTION	VARCHAR	30			Part description
ON_HAND	DECIMAL	4	0		Number of units on hand
CLASS	CHAR	2			Item class
PRICE	Decimal	6	2		Unit price

```

DROP TABLE IF EXISTS NON_SP_GOOD;

CREATE TABLE NON_SP_GOOD(
  PART_NUM CHAR(4) NOT NULL PRIMARY KEY,
  DESCRIPTION VARCHAR(30),
  ON_HAND DECIMAL(4,0),
  CLASS CHAR(2),
  PRICE DECIMAL(6,2)
);

SELECT * FROM NON_SP_GOOD;

```

100 %

Results Messages

PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE
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Problem 2. ?

Insert into the NON_SP_GOOD table the part number, part description, number of units on hand, item class, and unit price from the PART table for each part that is not in item class SG.

```

INSERT INTO NON_SP_GOOD
SELECT PART_NUM, DESCRIPTION, ON_HAND, CLASS, PRICE
FROM PART
WHERE CLASS != 'SG';

SELECT * FROM NON_SP_GOOD;

```

100 %

Results Messages

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

Problem 3

In the NON_SP_GOOD table, change the description of part number AT94 to Deluxe Iron.

```
UPDATE NON_SP_GOOD
SET DESCRIPTION = 'Deluxe Iron'
WHERE PART_NUM = 'AT94';

SELECT * FROM NON_SP_GOOD;
```

100 %

Results Messages

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE
1	AT94	Deluxe Iron	50	HW	24.95
2	CD52	Microwave Oven	32	AP	165.00
3	DL71	Cordless Drill	21	HW	129.95
4	DR93	Gas Range	8	AP	495.00
5	DW11	Washer	12	AP	399.99
6	FD21	Stand Mixer	22	HW	159.95
7	KL62	Dryer	12	AP	349.95
8	KT03	Dishwasher	8	AP	595.00

Problem 4

In the NON_SP_GOOD table, increase the price of each item in item class HW by 2%.

```
UPDATE NON_SP_GOOD
SET PRICE = 1.02*PRICE
WHERE CLASS = 'HW';

SELECT * FROM NON_SP_GOOD;
```

100 %

Results Messages

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE
1	AT94	Deluxe Iron	50	HW	25.45
2	CD52	Microwave Oven	32	AP	165.00
3	DL71	Cordless Drill	21	HW	132.55
4	DR93	Gas Range	8	AP	495.00
5	DW11	Washer	12	AP	399.99
6	FD21	Stand Mixer	22	HW	163.15
7	KL62	Dryer	12	AP	349.95
8	KT03	Dishwasher	8	AP	595.00

Problem 5

Add the following part to NON_SP_GOOD table: part number: LJ28, description: Electric Razor, number of units on hand: 21, class: AP, and price 39.95.

```
INSERT INTO NON_SP_GOOD
VALUES
('LJ28', 'Electric Razor', 21, 'AP', 39.95);

SELECT * FROM NON_SP_GOOD;
```

100 %

Results Messages

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE
1	AT94	Deluxe Iron	50	HW	25.45
2	CD52	Microwave Oven	32	AP	165.00
3	DL71	Cordless Drill	21	HW	132.55
4	DR93	Gas Range	8	AP	495.00
5	DW11	Washer	12	AP	399.99
6	FD21	Stand Mixer	22	HW	163.15
7	KL62	Dryer	12	AP	349.95
8	KT03	Dishwasher	8	AP	595.00
9	LJ28	Electric Razor	21	AP	39.95

Problem 6

Delete every part in NON_SP_GOOD table for which the class is HW.

```
DELETE FROM NON_SP_GOOD
WHERE CLASS = 'HW';

SELECT * FROM NON_SP_GOOD;
```

100 %

Results Messages

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE
1	CD52	Microwave Oven	32	AP	165.00
2	DR93	Gas Range	8	AP	495.00
3	DW11	Washer	12	AP	399.99
4	KL62	Dryer	12	AP	349.95
5	KT03	Dishwasher	8	AP	595.00
6	LJ28	Electric Razor	21	AP	39.95

Problem 7

In the NON_SP_GOOD table, change the class for part KL62 to null.

```
UPDATE NON_SP_GOOD
SET CLASS = NULL
WHERE PART_NUM = 'KL62';

SELECT * FROM NON_SP_GOOD;
```

100 %

Results Messages

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE
1	CD52	Microwave Oven	32	AP	165.00
2	DR93	Gas Range	8	AP	495.00
3	DW11	Washer	12	AP	399.99
4	KL62	Dryer	12	NULL	349.95
5	KT03	Dishwasher	8	AP	595.00
6	LJ28	Electric Razor	21	AP	39.95

Problem 8

Add a column named ON_HAND_VALUE to the NON_SP_GOOD table. The allocation is a 7-digit number with 2 decimal places, representing the product of the number of units on hand and the price. Then set all values on ON_HAND_VALUE to ON_HAND * PRICE.

```
ALTER TABLE NON_SP_GOOD
ADD ON_HAND_VALUE DECIMAL(7,2);

UPDATE NON_SP_GOOD
SET ON_HAND_VALUE = ON_HAND * PRICE;

SELECT * FROM NON_SP_GOOD;
```

100 %

Results Messages

	PART_NUM	DESCRIPTION	ON_HAND	CLASS	PRICE	ON_HAND_VALUE
1	CD52	Microwave Oven	32	AP	165.00	5280.00
2	DR93	Gas Range	8	AP	495.00	3960.00
3	DW11	Washer	12	AP	399.99	4799.88
4	KL62	Dryer	12	NULL	349.95	4199.40
5	KT03	Dishwasher	8	AP	595.00	4760.00
6	LJ28	Electric Razor	21	AP	39.95	838.95

Problem 9

In the NON_SP_GOOD table, increase the length of PART_DESCRIPTION column to 40 characters.

```
ALTER TABLE NON_SP_GOOD  
ALTER COLUMN DESCRIPTION VARCHAR(40);
```



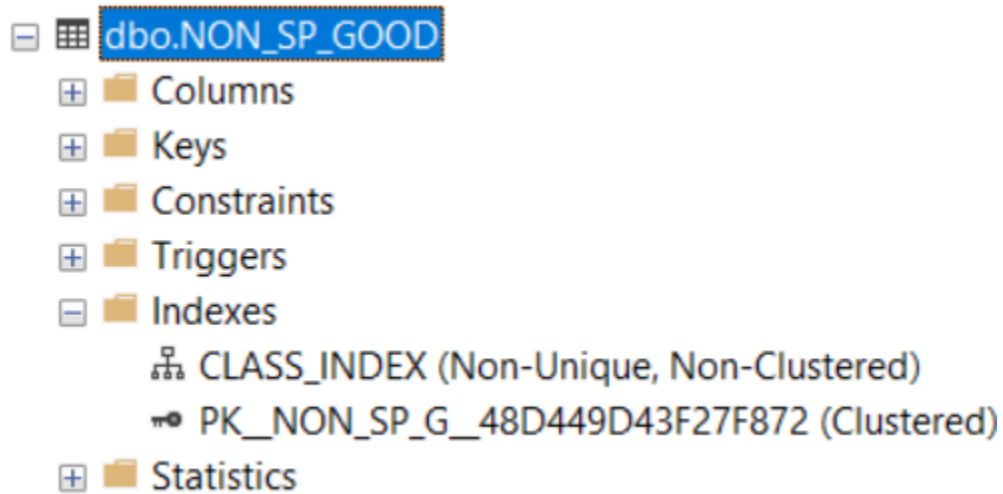
The screenshot shows the 'Columns' folder expanded for the 'dbo.NON_SP_GOOD' table. The columns listed are:

Column Name	Data Type	Nullability	Other Properties
PART_NUM	char(4)	not null	Primary Key (PK)
DESCRIPTION	varchar(40)	null	
ON_HAND	decimal(4,0)	null	
CLASS	char(2)	null	
PRICE	decimal(6,2)	null	
ON_HAND_VALUE	decimal(7,2)	null	

Problem 10

Create index named CLASS_INDEX on the CLASS column in the NON_SP_GOOD table.

```
CREATE INDEX CLASS_INDEX ON NON_SP_GOOD(CLASS);
```



The screenshot shows the 'Indexes' folder expanded for the 'dbo.NON_SP_GOOD' table. The indexes listed are:

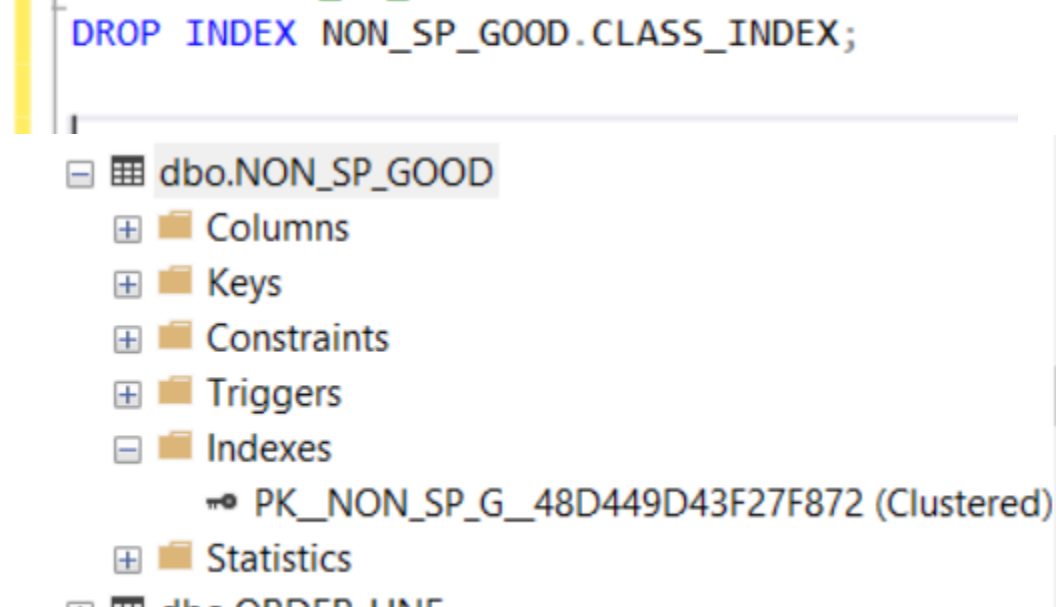
Index Name	Index Type
CLASS_INDEX	Non-Unique, Non-Clustered
PK_NON_SP_G_48D449D43F27F872	Clustered

Other folders visible include Columns, Keys, Constraints, Triggers, and Statistics.

Problem 11

Delete the CLASS_INDEX from the NON_SP_GOOD table and the NON_SP_GOOD table from the Premiere Products database.

Drop the CLASS_INDEX:



Drop the table:

