

## Database - PE03

**Due Date (See MyCourses ASSIGNMENTS)**

**Assignment Box PE03**

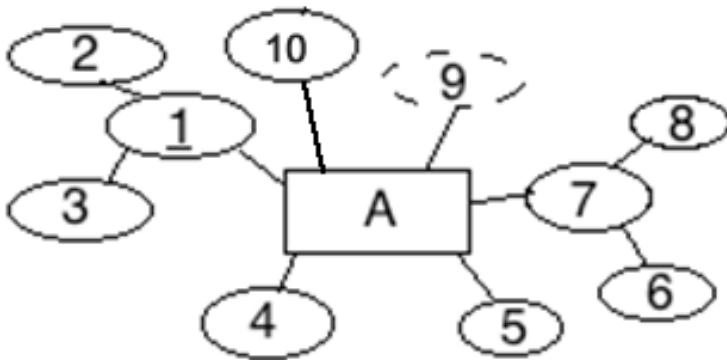
**Instructions:**

- 1) Download this Word Document. Type your answers in this Word Document.
- 2) Convert this Word Document INTO PDF Document after you complete all your answers.

Name: **Please put Last name (Lastname, Firstname)** \_\_\_\_\_ Lynch, Connor \_\_\_\_\_

**Part 1**

Using relational structure notation, please transpose the E-R diagram below - **Create the Relational Schema**.



**Part 1 Write the Relational Schema for the entity A**

**A(2, 3, 4, 5, 6, 8, 10)**

**Convert Part 1 Relational Schema into a MySQL table.** You can assume every attribute/field is an INT UNSIGNED NOT Null.

**CREATE TABLE A(**

**Item2 INT UNSIGNED NOT NULL,**

**Item3 INT UNSIGNED NOT NULL,**

**Item4 INT UNSIGNED NOT NULL,**

**Item5 INT UNSIGNED NOT NULL,**

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Item6 INT UNSIGNED NOT NULL,

Item8 INT UNSIGNED NOT NULL,

Item10 INT UNSIGNED NOT NULL,

PRIMARY KEY(Item2, Item3)

);

**Part 2**

For each relation below, state whether or not the relation is in 1NF. If the relation is not in 1NF, please list the characteristic(s) being violated.

A(1, 2, 3, 4, 5, 6, 6, 7)

**Your Answer:** Not in 1NF, 6 is listed twice

B(1, 2, 3, 4)

**Your Answer:** Not in 1NF, no primary key

C(1, 2, 3, 4, 5, 6, 7, 8)

**Your Answer:** In 1NF

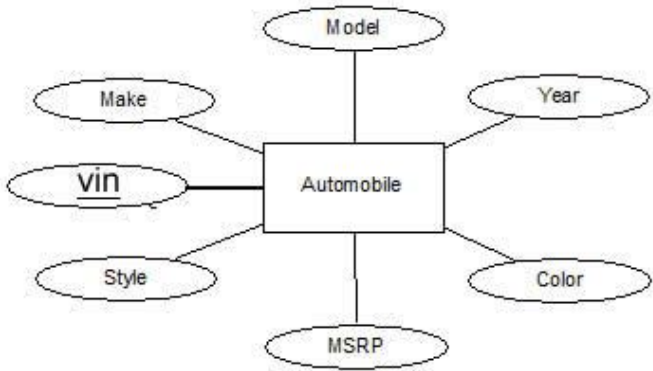

D(1, 2, 3)

**Your Answer:** In 1NF

E(1, 2, 3)

**Your Answer:** In 1NF

For this exercise, consider the following:

E-R Diagram	UML Diagram
 <pre> erDiagram     Automobile   --o{ Make : "has"     Automobile   --o{ Model : "has"     Automobile   --o{ Year : "has"     Automobile   --o{ Color : "has"     Automobile   --o{ Style : "has"     Automobile   --o{ MSRP : "has"     Automobile   --o{ VIN : "has"             </pre>	 <pre> classDiagram     class automobile {         MAKE VARCHAR(15)         MODEL VARCHAR(15)         YEAR CHAR(4)         COLOR CHAR(15)         STYLE CHAR(15)         MSRP DOUBLE         VIN SMALLINT(5) PK     }             </pre>

1. Write and execute an SQL CREATE statement to create a database named PE3. Write the statement below.

\_\_\_\_CREATE DATABASE PE03;\_\_\_\_\_

2. Write script and run the script to CREATE the Automobile table in your PE3 database. Set the VIN attribute as the Primary key and Make sure it is AUTO INCREMENT.

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Make sure the “—verbose” option is turned on. Next, create a “tee” file.

MySQL> tee pe03.txt

I **always** want many comments in your TEE and Script file. Please add the following SQL comments into the top of your TEE file and your SQL file

```
-- Your name (Lastname, Firstname)
-- Database Homework
-- What Semester
```

```
-- Course/Section ISTE???.??
```

- ✓ Write and execute a script that contains 5 INSERT statements to insert the with the data from PAGE 3 of this Practice Exercise #3
- ✓ Write 2 SELECT statements. One that will display all the records in the table Automobile HORIZONTALLY, and a second SELECT statement that will display all the records VERTICALLY!
- ✓ Write and execute a statement like the following  
DESCRIBE Automobile;
- ✓ Notee -- close your tee file.
- ✓ Upload **BOTH** your .sql file AND your tee file to this PE assignment box.

The vin column is set to **AUTO INCREMENT**

Make Up to 15 char	Model Up to 15 char	Year 4 char	Color Up to 15 char	Style Up to 15 char	MSRP Double or DEC  WHAT would DEC look like	<u>VIN</u> Int(4)  UNSIGNED ZEROFILL NOT NULL AUTO_INCREMENT
Chevy	Volt	2017	White	Hybrid	39290.99	0001
Ford	Mustang	2019	Blue	Convertible	47900.99	0002
Toyota	Prius	2018	Silver	Hybrid	25000.99	0003

Toyota	Camry	2008	Blue	Sedan	2000.50	0004
Dodge	1500	2007	Green	Pickup	1799.99	0005