

## **USE ERD to Create SQL Database**

## Car Dealership

Create an ERD for a car dealership. The dealership sells both new and used cars, and it operates a service facility. Base your design on the following business rules:

- 1. A salesperson may sell many cars, but each car is sold by **only one** salesperson.
- 2. A customer may buy many cars, but each car is **purchased by only one customer**.
- 3. A salesperson writes a **single invoice** for each <u>car</u> they sell.
- 4. A customer gets **an** invoice for each car they buy.
- 5. A customer may come in just to have their car serviced; that is, a customer need not buy a car to be classified as a customer.
- 6. When a customer takes <u>one or more</u> cars in for repair or service, **one service ticket is** written for each car.
- 7. The car dealership maintains a service history for each of the cars serviced. The service records are referenced by the car's serial number.
- 8. A car brought in for service can be worked on by many mechanics, and each mechanic may work on many cars.
- 9. A car that is serviced may or may not need parts (e.g., adjusting a carburetor or cleaning a fuel injector nozzle does not require providing new parts).

After the tables have been created, use SQL to add data to the database

Each person will need to create their own SQL database.

TABLES NEEDED: Primary Key / Foreign Key:

- a. dealership
- b. salesperson
- c. customer
- d. new\_cars
- e. used cards
- f. invoice
- g. service\_ticket
- h. service\_history
- i. parts
- j. mechanics
- k. payments