RIT ISTE230	Introduction to Database & Data Modeling PE #06	Fall 2022 (2221)

1Name: Please print Last name (Lastname, Firstname)____Eng, Chris_____
Practice Exercise 6 Posted First week of school
Due Monday October 17, 2022 @ 11:59pm Assignment box PE06

EXAMPLE - PO_Detail Table below is not in 3NF

PO_Detail(**PO#**, **CustID**, CustName, ContactName, OrderDate, BillToAddress, ShipToAddress, **ProdID**, ProdDescription, UnitPrice, Quantity,Date,Amount)

Functional dependencies:

PO# → OrderDate, BillToAddress, ShipToAddress

CustID → CustName, ContactName

ProdID → ProdDescription, UnitPrice

PO#, Date → Amount

Given a relational schema for PO Details and functional dependencies above, a "NORMALIZED" set of tables to hold the information would look like the following. Create a valid script for the 5 tables/entities including Primary key's and foreign keys.

PO_Detail(**PO,** *CustID*, *ProductID*, Quantity)
- - - - - - - - - - -

Customer(**CustID**, CustName, CustContact)

Product(**ProdID**, ProdDescription, UnitPrice)

PO (***PO***, OrderDate, BillToAddress, ShipToAddress)
- - - -
(fk)

Paid_PO(***PO*, Date**, Amount)
- - -
(fk)

Two of the four **M**ust **E**xist **I**n statements (**M.E.I**) are below:

```
Paid_PO(PO)   M.E.I.   PO_Detail(PO)
PO(PO)        M.E.I.   PO_Detail(PO)
```

RIT ISTE230	Introduction to Database & Data Modeling PE #06	Fall 2022 (2221)

Create one long script file named YourLastname_Week8.sql The script will create one database with 5 tables. Make sure your script creates the correct Primary keys and foreign keys (Must use constraint names).

After your errors are out of your script file, create a tee file yourLastnamePE06.txt Run your error free script file while your tee file is open. Close your tee file. Convert your TEE (.txt) file to a .pdf file. Upload .sql, .txt and .pdf files to the assignment box. (Same as every homework)

MAKE SURE YOUR – VERBOSE OPTION IS ON AND WORKING WHEN YOU RUN YOUR SCRIPT.

For Page 2 Problem 1 and Problem 2, write the logical correct Functional Dependencies

Page 2 - **PROBLEM 1** **for page 2 Problem 1 and problem 2 type or write neatly your answers and submit this document in .pdf format to the Assignment box.**

Ship(BoatId, NbrOfPools, YearMade, Tonnage, CompanyId, CompanyName)
Functional dependencies are?

BoatID → NbrOfPools, YearMade, Tonnage

CompanyID → CompanyName

Page 2 - **PROBLEM 2** **QOH stands for Quantity On Hand**

Inventory(PartNbr, Warehouse, Location, QOH, Weight, PartColor)

Sample Data

PartNbr	Warehouse	Location	QOH	Weight	PartColor
01	500	NW	135	11.75	Blue
01	600	SW	210	11.75	Blue
01	800	East	192	11.75	Blue
02	500	NW	75	2.50	Red
02	800	East	45	2.50	Red
03	500	NW	290	21.35	Green
03	600	SW	83	21.35	Green

Functional dependencies are?

PartNbr → QOH, weight, PartColor

Warehouse → Location