Your existing tables are incomplete or have errors in attributes, keys and relationships:

* Customer\_T
  + CustomerAddress should break down to “StreetAddress”, “City”, “State”, “Zip”. Similar issue with Supplier\_T.SupplierAddress.
* Product\_T
  + Remove OrderID.
  + UnitCost and UnitPrice should be Decimal type.
* Supplier\_T
  + Remove ProductID and ProductName.
* Category\_T
  + Remove ProductID

You are missing 2 associative tables of the 7 tables and their relationships:

* OrderLine\_T
  + OrderLine\_T is an associate table between Order\_T and Product T because of the N:M relationship.
* Supply\_T
  + Similarly as OrderLine\_T, Supply\_T is an associate table between Supplier\_T and Product T because of the N:M relationship.

You also did not use ERwin to complete Task 3.

Your Project 1 score: 6/10

Suggestion: Please review Chapter 4-6 to understand the use of PK, FK, and associative entities. Please also review Project 1 requirement doc carefully and make sure your database model covers all entities and attributes specified by the business rules. Also install ERwin and create ERD there.

**Table 1: Data Dictionary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Entity** | **Attribute** | **Key (mark if PK and/or FK)** | **Data Type\* and field length in format of Domain/Category (length or precision)** |
| CUSTOMER\_T | CustomerID | PK | Number / Integer |
|  | CustomerName |  | String / Varchar (100) |
|  | CustomerAddress |  | String / Varchar (200) |
|  | CustomerCity |  | String / Varchar (100) |
|  | CustomerPhone |  | Number / Integer |

|  |  |  |  |
| --- | --- | --- | --- |
| ORDER\_T | OrderID | PK | Number / Integer |
|  | CustomerID | FK | Number / Integer |
|  | OrderAmount |  | Number / Integer |
|  | OrderDate |  | DateTime/Date |
|  | OrderStatus |  | String / Varchar (100) |
|  | ShipDate | ­­­­ | DateTime/Date |

|  |  |  |  |
| --- | --- | --- | --- |
| PRODUCT\_T­­­ | ProductID | PK | Number / Integer |
|  | ProductName |  | String / Varchar (100) |
|  | OrderID | FK | Number / Integer |
|  | UnitCost |  | Number / Integer |
|  | Quantity |  | Number / Integer |
|  | CatergoryID | FK | Number / Integer |
|  | ProductUnitPrice |  | Number / Integer |

|  |  |  |  |
| --- | --- | --- | --- |
| SUPPLIER\_T | SupplierID | PK | Number / Integer |
|  | SupplierName |  | String / Varchar (100) |
|  | SupplierAddress |  | String / Varchar (200) |
|  | SupplierPhone |  | Number / Integer |
|  | ProductName |  | String / Varchar (100) |
|  | ProductID | FK | Number / Integer |

|  |  |  |  |
| --- | --- | --- | --- |
| CATEGORY\_T | CatergoryID | PK | Number / Integer |
|  | CategoryName |  | String / Varchar (100) |
|  | ProductID | FK | Number / Integer |

**Table 2: Referential Integrity**

|  |  |
| --- | --- |
| **Relationship** | **Cardinality Constraints\*\*** |
| CUSTOMER\_T -> ORDER\_T | Optional Many |
| ORDER\_T -> CUSTOMER\_T | Mandatory One |
| ORDER\_T -> PRODUCT\_T­­­ | Mandatory many |
| PRODUCT\_T­­­ -> ORDER\_T | Optional Many |
| PRODUCT\_T­­­ -> SUPPLIER\_T | Optional Many |
| CATEGORY\_T -> PRODUCT\_T­­­ | Optional Many |