**Assignment – III**

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**1.Definitions:**

**Composite attribute:**

Composite attributes can be divided into smaller subparts, which represent more basic attributes with independent meanings.

**MultiValued Attribute:**

A multivalued attribute may have lower and upper bounds to constrain the number of values allowed for each individual entity. For example, the Colors attribute of a car may be restricted to have between one and three values, if we assume that a car can have three colors at most.

**Value Set (Domain):**

Each simple attribute of an entity type is associated with a value set (or domain of values), which specifies the set of values that may be assigned to that attribute for each individual entity.

**Role Name:**

Each entity type that participates in a relationship type plays a particular role in the relationship. The role name signifies the role that a participating entity from the entity type plays in each relationship instance, and helps to explain what the relationship means.

**Derived Attributed:**

In some cases, two (or more) attribute values are related—for example, the Age and Birth\_date attributes of a person. For a particular person entity, the value of Age can be determined from the current (today’s) date and the value of that person’s Birth\_date. The Age attribute is hence called a derived attribute and is said to be derivable from the Birth\_date attribute

**3. Ex. 9.4 (Page 299).**

Table Name: Ship

|  |  |  |  |
| --- | --- | --- | --- |
| Ship\_Name | Owner | Ship\_Type | Port\_Name |

Table Name: Ship Type

|  |  |  |
| --- | --- | --- |
| Ship\_Type | Tonnage | Hull |

Table Name: Ship\_Movement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Time | Longitude | Latitude | Ship\_Name |

Table Name: Port

|  |  |  |
| --- | --- | --- |
| Port\_Name | State\_Name | Sea\_Name |

Table Name: State/Country

|  |  |
| --- | --- |
| State\_Name | Continent |

Table Name: Sea\_Ocean\_Lake

|  |
| --- |
| Sea\_Name |

Table Name: Port\_Visit

|  |  |  |
| --- | --- | --- |
| Ship\_Name | Start\_Date | End\_Date |

**4. Ex 9.8 (Page 300).**

**Consider the EER Diagram in Figure 9.9 for a car dealer…**

Table Name: Vehicle

|  |  |  |
| --- | --- | --- |
| Vin | Price | Model |

Table Name: Car

|  |  |
| --- | --- |
| Vin | Engine\_Size |

Table Name: Truck

|  |  |
| --- | --- |
| Vin | Tonnage |

Table Name: SUV

|  |  |
| --- | --- |
| Vin | No\_of\_Seats |

Table Name: Sale

|  |  |  |  |
| --- | --- | --- | --- |
| Vin | Sid | SSN | Date |

Table Name: Sales Person

|  |  |
| --- | --- |
| Sid | SName |

Table Name : Customer

|  |  |  |  |
| --- | --- | --- | --- |
| SSN | C\_Name | City | State |