Course Name: **A Level (1ˢᵗ Sem)**   Subject : **Introduction to DBMS**

Topic: **RDBMS & Its Terminologies (Part3)**   Date: **23-Mar-2020**

RDBMS Terminologies:

- **Types of Attributes:**
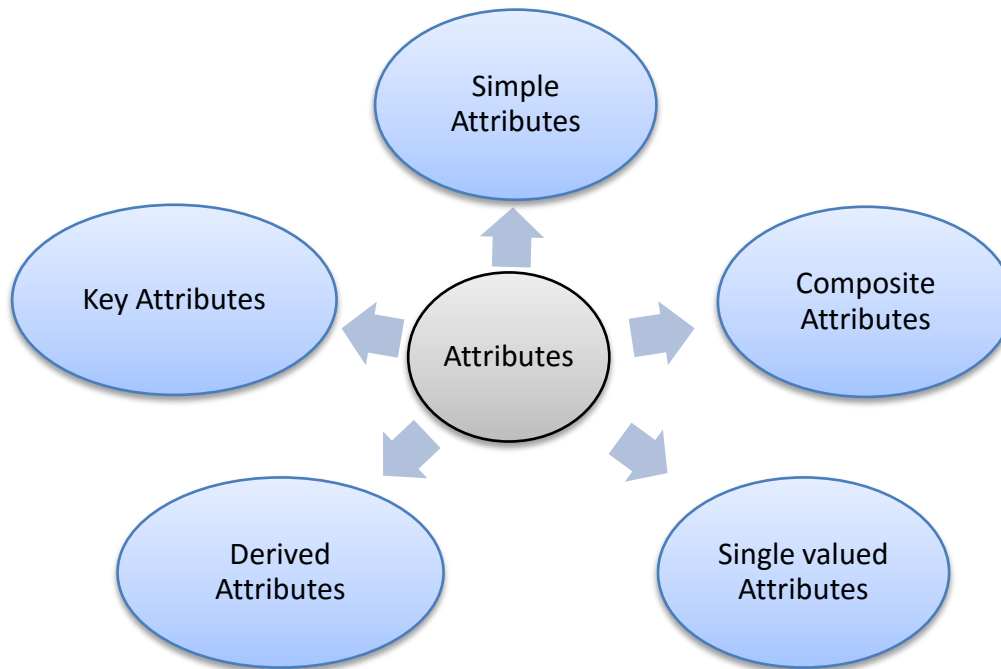
Simple Attributes

An attribute that has atomic values which cannot be divided further and is called Simple attribute.

For example *stu_dob, stu_mobile, stu_adhaar* are Simple Attributes.

Composite Attributes

An attribute that is combination of other attribute is called Composite Attribute.

For example *stu_address* attribute is composite attribute because it is composed of *address_line1, city, state, pin* attributes.

Stu_name is another example of composite attribute because it is composed of *stu_firstname, stu_middlename, stu_lastname* attributes.

Single valued Attributes

Single valued attributes are those attributes which can take only one value for a given entity from an entity set.

For example *stu_rollno, stu_aadhaar* are single valued attributes because these attribute can take only single value.

Multi valued Attributes

An attribute that can have more than one value is called Multi valued attribute.

For example *stu_mobile, stu_email* are Multi valued attribute because student can have more than one mobile number and email address.

Derived Attributes

An attribute whose value can be derived from another attribute is called Derived attribute.

For example *stu_age* is derived attribute because it is derived by *stu_dob* attribute.

Key Attributes

A key attribute can uniquely identify an entity from an entity set.

For example *stu_rollno* is key attribute because it can uniquely identify a student from set of students.

- **Attribute Domain**

Attribute Domain is a collection of all possible values from which the value for given column/attribute is drawn. There are domains defined for every attribute in each relation/able

For example: ***The domain of stu_name is the set of all alphabets strings of finite length.***

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Exercises:

1. Identify attribute domain for emp_mobile attribute.
2. Identify any two multi valued attribute.
3. Is it possible that one attribute can be of more than one type? Justify your answer with explanation.