**Week 1 Assignment**.

***Q1. What is Referential integrity rule 1?***

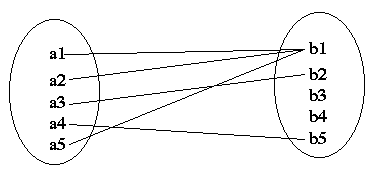
Referential integrity rule 1: A foreign key must have a marching primary key; this could be a null

***Q2. What is Referential integrity rule 2?***

Referential integrity rule 2: Each value for a foreign key column must preexist in the corresponding primary key column.

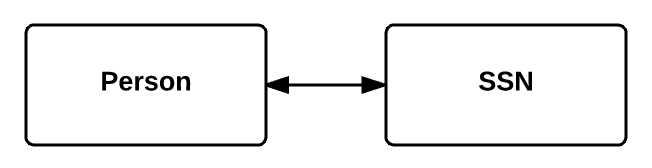
***Q3. What is Mapping Cardinality and Give the 3 types with examples each.***

* Mapping Cardinality is the number of rows in one table that corresponds to the number of rows in another table. E.g



Examples:

1:1 = 1 to 1

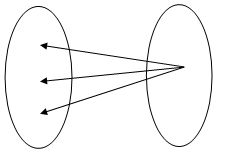


Example: One husband to one wife.

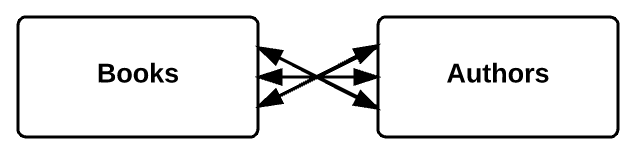
A person to a Social Security number

1:m = 1 to many

E.g: Account department with many employees



M:M= Many to Many

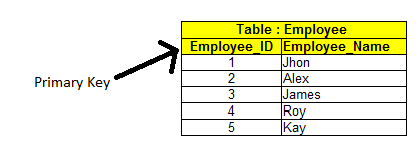


E.g : Many books to Many Authors

***Q4: What is primary Key and Foreign Key, give examples of each.***

Primary Key is one or more columns in a table that uniquely identifies the rows in that table

Examples of Primary key: *Employee ID* is a primary in the diagram below



Foreign Key: This is a duplicated primary key.

Examples of foreign key as shown below: ***courseid*** is a foreign key in diagram 1 while same courseid is primary key in diagram 2.

A screenshot of a cell phone

Description automatically generated