**DILIGENT DB ANALYSTS ASSIGNMENT 1**

1. What is Referential Integrity Rule 1?

The foreign key must match a record in the table it is referencing. i.e., the data type for a foreign key column must be the same as that for its corresponding primary key column in the referenced table.

1. What is Referential Integrity Rule 2?

Each value for a foreign key column must preexist in the corresponding primary key column.

1. What is Mapping Cardinality, give the 3 types with examples each.

Mapping cardinality refers to the number of rows in one table that corresponds to the number of rows in another table.

3 types: **one-to-one** e.g. one student to one student ID; one person to one drivers license number; one person to one social security number.

**Many-to-many** e.g. college students to college courses; Walmart customers to Walmart store products

**One-to-many or many-to-one** e.g. A museum to works of art; Deeper Life DC to Deeper Life DC pastors; DiligentDBAnalyst group to DiligentDBAnalyst group leader.

1. What is a primary and foreign key, give examples each.

A primary key is a unique identifier. E.g., a driver license number, social security number (SSN), vehicle identification number (VIN).

A foreign key is a duplicated primary key. E.g., a table called GROUP may have an attribute, MEMBER\_NAME, which is a foreign key referencing a candidate key, EMPLOYEE\_NAME in the EMPLOYEE table.