

# Assignment

## SQL Basics

### **Q9. What is the Difference Between a Primary Key and a Foreign Key?**

**Ans:**

A primary key is a column in a table that uniquely identifies each record. It does not allow duplicate or NULL values and ensures that every row in the table can be uniquely distinguished from others, thereby maintaining entity integrity. Each table can have only one primary key.

A foreign key, is a column that creates a link between two tables by referencing the primary key of another table. It can contain duplicate values and may allow NULL values. The foreign key ensures referential integrity by making sure that the value entered exists in the referenced table, helping maintain consistency between related tables.

### **Q10. What Are Constraints in SQL and Why Are They Used?**

**Ans:**

Constraints in SQL are rules applied to table columns to restrict the type of data that can be stored in them. They are used to ensure the accuracy, consistency, and integrity of the data in a database. Constraints prevent invalid data from being inserted, updated, or deleted and help maintain reliable relationships between tables.

Such as:

- PRIMARY KEY
- FOREIGN KEY
- UNIQUE
- NOT NULL
- CHECK
- DEFAULT