

# Lab Sheet 2

## Database Design and Implementation

### Introduction:

In this lab, you will design three database tables: Supplier, Product, and Purchase. These tables represent entities in a supply chain management system. You will implement primary keys, foreign keys, and various constraints such as Not Null and Unique to ensure the integrity of the database.

### Objective:

By the end of this lab, students will:

- Design and create tables based on given specifications.
- Implement relationships between tables using foreign keys.
- Apply constraints such as primary keys and unique keys.
- Understand and implement data types for database tables.

### Procedures:

1. Create the **Supplier** table based on the following table instance chart:

Column Name	Key Type	Null/ Unique	Data Type	Length
Supplier ID	Primary Key		Varchar2	4
Supplier Name		Not Null	Varchar2	50
Email		Unique	Varchar2	30

2. Create the **Product** table based on the following table instance chart:

Column Name	Key Type	Null/ Unique	Data Type	Length
Product ID	Primary Key		Varchar2	4
Product Name		Not Null	Varchar2	50

3. Create the **Purchase** table based on the following table instance chart:

Column Name	Key Type	Null/ Unique	Data Type	Length	FK Table	FK Column
Supplier ID	Primary Key		Varchar2	4	Supplier	Supplier ID
Product ID			Varchar2	4	Product	Product ID
Quantity		Not Null	Number	6		