**Lab 1: Understanding ORM with a Retail Inventory System**

Scenario:

You’re building an inventory management system for a retail store. The store wants to track products, categories, and stock levels in a SQL Server database.

Objective:

Understand what ORM is and how EF Core helps bridge the gap between C# objects and relational tables.

* Explain how ORM maps C# classes to database tables.

Object-Relational Mapping (ORM) maps C# classes to database tables. For example, a Product class with properties like Id and Name maps to a Products table with corresponding columns.

All the required packages like - Microsoft.EntityFramework.SQLServer, Microsoft.EntityFramework.Tools and Microsoft.EntityFramework.Design are added.

* EF Core vs EF Framework:
* EF Core is cross-platform, lightweight, and supports modern features like
* LINQ, async queries, and compiled queries.
* EF Framework (EF6) is Windows-only and more mature but less flexible.
* EF Core 8.0 Features:
* JSON column mapping.
* Improved performance with compiled models.
* Interceptors and better bulk operations.