**Lab 7: Writing Queries with LINQ.**

**Scenario: The store wants to filter and sort products for reporting.**

**Objective: Use Where, Select, OrderBy, and project into DTOs.**

**PROGRAM.CS**

using System;

using System.Threading.Tasks;

using Microsoft.EntityFrameworkCore;

using System.Linq;

namespace RetailInventory

{

class Program

{

static async Task Main(string[] args)

{

using var context = new AppDbContext();

// 1. Filter products with Price > 1000 and sort by descending price

var filtered = await context.Products

.Where(p => p.Price > 1000)

.OrderByDescending(p => p.Price)

.ToListAsync();

Console.WriteLine("Filtered and Sorted Products:");

foreach (var product in filtered)

{

Console.WriteLine($"{product.Name} - ₹{product.Price}");

}

Console.WriteLine();

// 2. Project into DTO (only Name and Price)

var productDTOs = await context.Products

.Select(p => new ProductDTO

{

Name = p.Name,

Price = p.Price

})

.ToListAsync();

Console.WriteLine("Product DTOs:");

foreach (var dto in productDTOs)

{

Console.WriteLine($"{dto.Name} - ₹{dto.Price}");

}

}

}

// DTO class

public class ProductDTO

{

public string Name { get; set; }

public decimal Price { get; set; }

}

**}  
  
OUTPUT :**