

Lab 5: Retrieving Data from the Database

● Retrieving all the data, Finding by ID, FirstOrDefault with Condition:

```

Program.cs
using Microsoft.EntityFrameworkCore;
using System;
using System.Threading.Tasks;

class Program
{
    static async Task Main(string[] args)
    {
        using var context = new AppDbContext();
        // 1. Retrieve all products
        Console.WriteLine("🔍 All Products:");
        var products = await context.Products.Include(p => p.Category).ToListAsync();
        foreach (var p in products)
        {
            Console.WriteLine($"{p.Name} - ₹{p.Price} ({p.Category?.Name})");
        }
        Console.WriteLine();

        // 2. Find by ID
        Console.WriteLine("🔍 Find Product by ID = 1:");
        var product = await context.Products.FindAsync(1);
        Console.WriteLine($"Found: {product?.Name}");
        Console.WriteLine();

        // 3. FirstOrDefault with condition
        Console.WriteLine("🔍 First Expensive Product (Price > 50,000):");
        var expensive = await context.Products
            .Include(p => p.Category)
            .FirstOrDefaultAsync(p => p.Price > 50000);
        Console.WriteLine($"Expensive: {expensive?.Name} - ₹{expensive?.Price} ({expensive?.Category?.Name})");
        Console.WriteLine("\n✅ Data retrieval complete.");
    }
}

```

Output

```

PS C:\Users\KIIT\OneDrive\Desktop\Cognizant\RetailInventory\RetailInventory> dotnet run
🔍 All Products:
Laptop - ₹75000.00 (Electronics)
Rice Bag - ₹1200.00 (Groceries)

🔍 Find Product by ID = 1:
Found: Laptop

🔍 First Expensive Product (Price > 50,000):
Expensive: Laptop - ₹75000.00 (Electronics)

✅ Data retrieval complete.

```

Verifying in SQL Server

SQLQuery3.sql...3\KIIT (64)*

```

1 SELECT
2     p.Name AS ProductName,
3     p.Price,
4     c.Name AS CategoryName
5 FROM Products p
6 JOIN Categories c ON p.CategoryId = c.Id;
7

```

100 % No issues found

Results Messages

	ProductName	Price	CategoryName
1	Laptop	75000.00	Electronics
2	Rice Bag	1200.00	Groceries