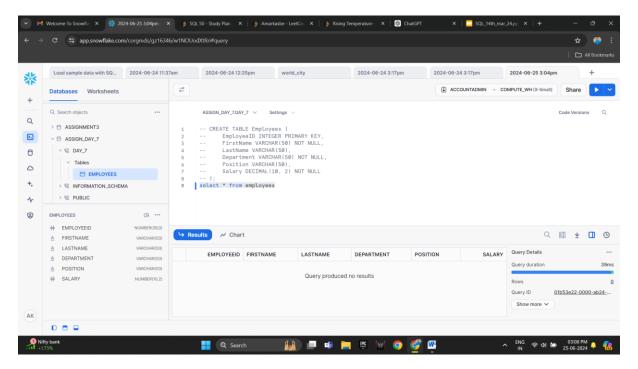
Assignment Day 4

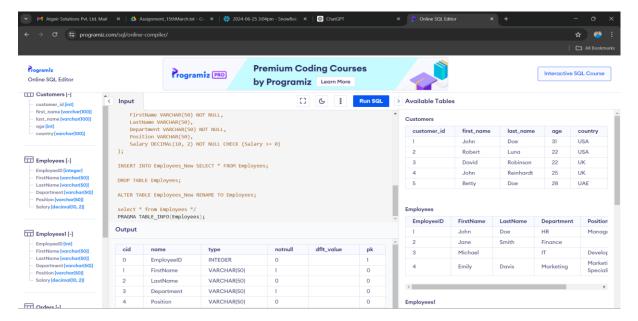
1. Constraints:

Question:

- 1. Define a table named "Employees" with the following columns:
 - EmployeeID (integer) as the primary key.
 - FirstName (string) with a maximum length of 50 characters, not allowing NULL values.
 - LastName (string) with a maximum length of 50 characters, allowing NULL values.
 - Department (string) with a maximum length of 50 characters, not allowing NULL values.
 - Position (string) with a maximum length of 50 characters, allowing NULL values.
 - Salary (decimal) with precision 10 and scale 2, not allowing NULL values.

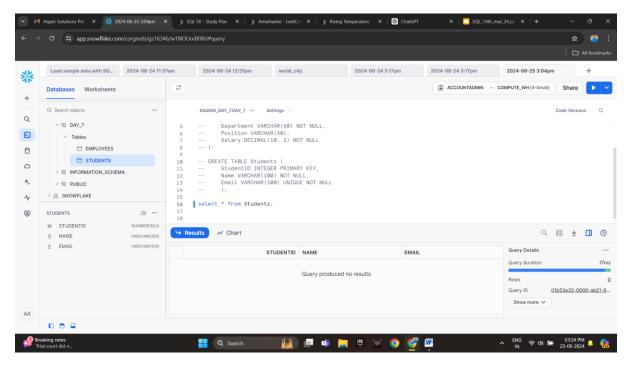


- **Question:**
- 2. Alter the "Employees" table to add a constraint ensuring that the Salary column cannot be negative.



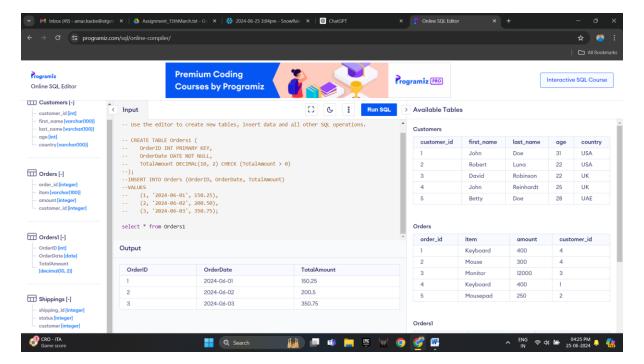
Question:

- 3. Define a table named "Students" with the following columns:
 - StudentID (integer) as the primary key.
 - Name (string) with a maximum length of 100 characters, not allowing NULL values.
- Email (string) with a maximum length of 100 characters, ensuring it is unique for each student.



Question:

- 4. Create a table named "Orders" with the following columns:
 - OrderID (integer) as the primary key.
 - OrderDate (date) not allowing NULL values.
 - TotalAmount (decimal) with precision 10 and scale 2, ensuring it is greater than zero.



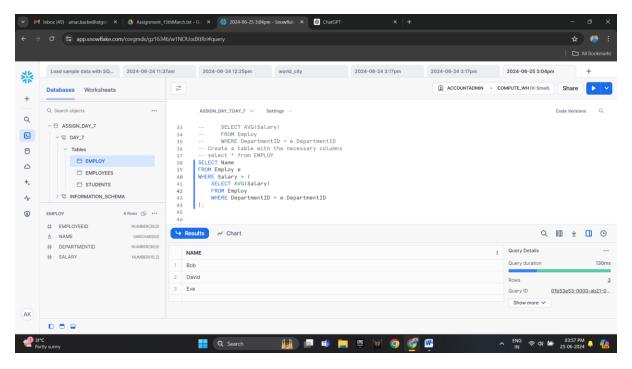
2. Subqueries:

Question:

Write a SQL query to retrieve the names of employees who have salaries greater than the average salary of their respective departments.

Data Source Info:

You can provide a sample "Employees" table containing columns like EmployeeID, Name, DepartmentID, Salary, etc.



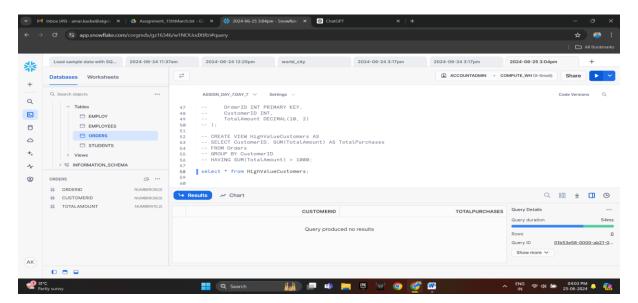
3. Views:

Question:

Create a view named "HighValueCustomers" that displays the details of customers who have made purchases totaling more than \$1000.

Data Source Info:

Provide a sample "Orders" table containing columns like OrderID, CustomerID, TotalAmount, etc.



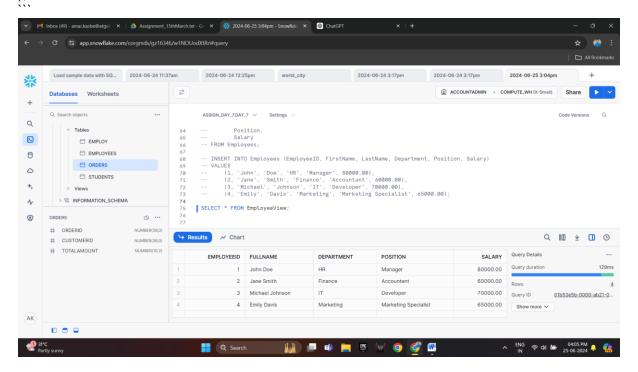
Question:

You are tasked with creating a view for a human resources database to display employee information. Design a view named "EmployeeView" that includes the following columns: EmployeeID, FullName, Department, Position, and Salary.

Data Source Info:

Here is a simplified structure of the "Employees" table:

```
""sql
CREATE TABLE Employees (
EmployeeID INT PRIMARY KEY,
FirstName VARCHAR(50),
LastName VARCHAR(50),
Department VARCHAR(50),
Position VARCHAR(50),
Salary DECIMAL(10, 2)
):
```



Question:

In a bookstore database, create a view named "BestSellers" to display information about the top-selling books. Include the following columns: BookID, Title, Author, Genre, and SalesQuantity.

Data Source Info:

Here is a simplified structure of the "Books" table:

```
""sql
CREATE TABLE Books (
BookID INT PRIMARY KEY,
Title VARCHAR(100),
Author VARCHAR(100),
Genre VARCHAR(50),
SalesQuantity INT
);
```

