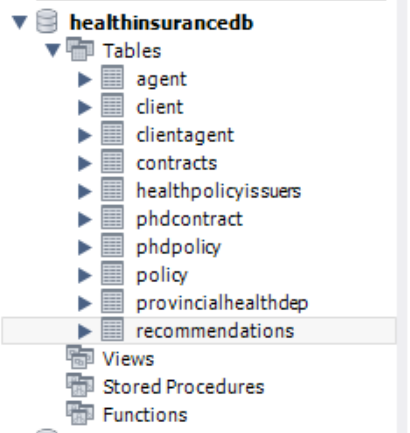
Ryerson University  
CIND110  
Data Organization for Data Analysts  
Assignment IModeling a Relational Database

**Given below are the details of the** **HealthInsuranceDB database schema**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | **Attribute** | **Data Type** | **Primary Key** | **Foreign Key** |
| **Client** | HealthCardNo First\_Name Last\_Name Address  Age | CHAR(12) VARCHAR(40) VARCHAR(40) VARCHAR(100)  INT | Yes |  |
| **Agent** | SIN  First\_Name  Last\_Name  Speciality Experience | CHAR(9)  VARCHAR(40) VARCHAR(40)  VARCHAR(50)  INT | Yes |  |
| **Policy** | Trade\_Name Symbol  Fk\_HPI\_Name | CHAR(100) VARCHAR(50) | Yes | Yes |
| **ProvincialHealthDep** | Name  Address  PhoneNo  Price  Curency | CHAR(100) VARCHAR(100) VARCHAR(15)  INT  INT | Yes  Yes  Yes |  |
| **HealthPolicyIssuers** | Name PhoneNo | CHAR(100) VARCHAR(15) | Yes |  |
| **Contracts** | StartDate  EndDate  Text | DATE  DATE  VARCHAR(512) | Yes  Yes  Yes |  |
| **Recommendations** | Date  Quantity  Fk\_Policy\_Trade\_Name  Fk\_Client\_HealthCardNo | DATE  CHAR(12) | Yes  Yes | Yes  Yes |
| **ClientAgent** | CL\_HealthCardNo IA\_SIN | CHAR(12) CHAR(9) | Yes Yes | Yes  Yes |
| **PHDContarct** | PHDName  PHDAddress  PHDPhoneNo  ContStartDate  ContEnd\_Date  ContText | CHAR(100)  VARCHAR(100)  VARCHAR(15)  DATE  DATE  VARCHAR(512) | Yes  Yes  Yes  Yes  Yes  Yes | Yes  Yes  Yes  Yes  Yes  Yes |
| **PHDPolicy** | PHDName  PHDAddress  PHDPhoneNo  Trade\_Name | CHAR(100)  VARCHAR(100)  VARCHAR(15)  CHAR(100) | Yes  Yes  Yes  Yes | Yes  Yes  Yes  Yes |

**HealthInsuranceDB database schema:**

****

**Note:**

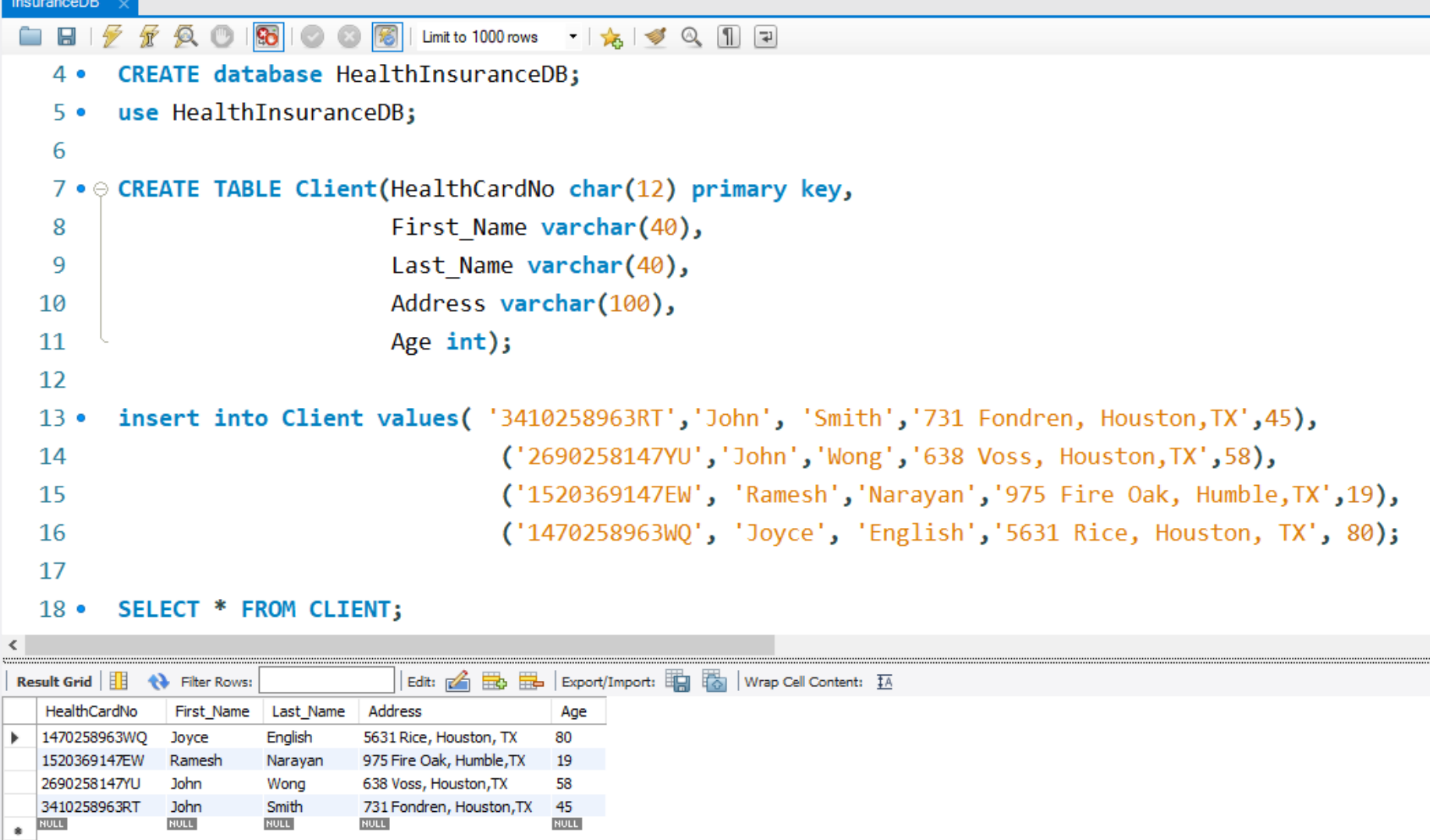
1)- In the contract table, we have 3 attributes namely StartDate, EndDate, Text of the contract., I consider the primary key as the composite of three attributes. In the real scenario, we Should assign longtext datatype to Text of the contract but here because I consider the text of the contract as a part of primary key it raised an error when the datatype was longtext. So I have to change this data type from longtxt to varchar(512) to solve the error.

2)- In the recommendation table, I consider Quantity data type as a ‘Char’ because It should be matched to the Trade\_name and ClientHeachCradNo datatype in the foreign key.

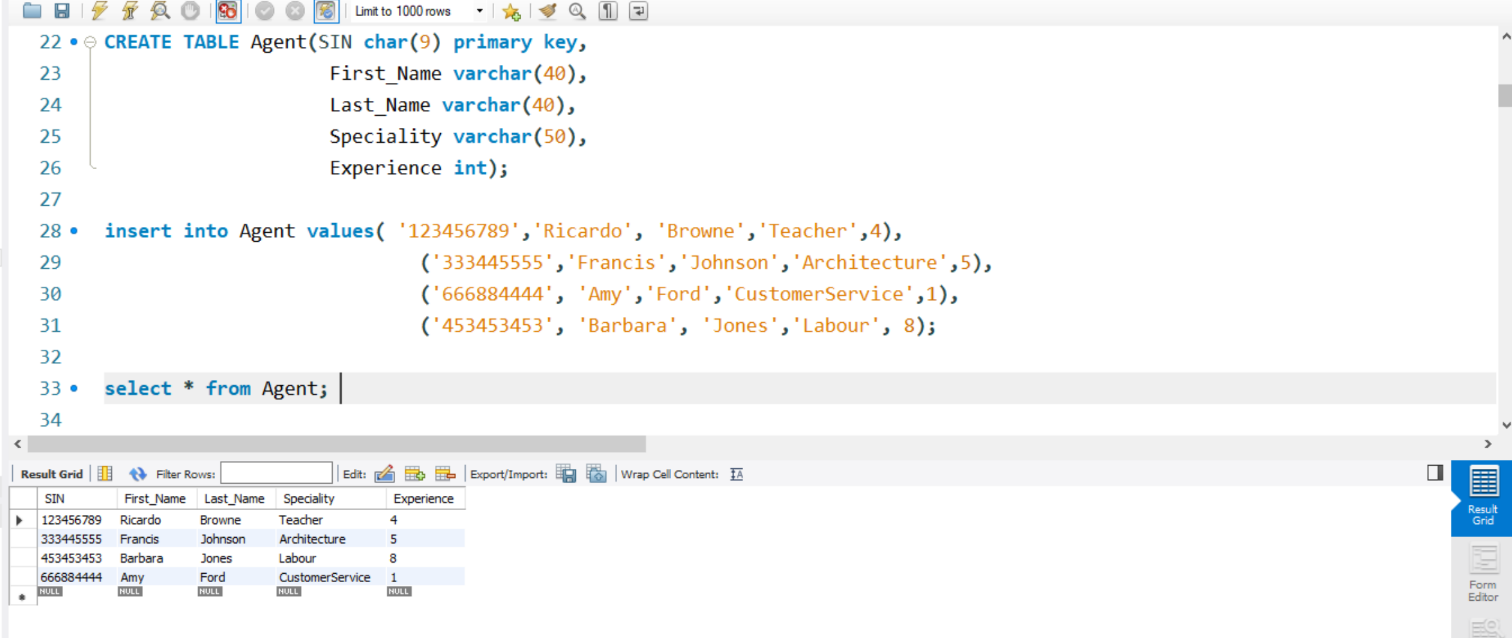
In this assignment, I Did both Forward and Reverse engineer. The outputs are attached as the ForwardEngineerHealthInsuranceDB.sql and ReverseEnginnerHealthInsuranceDB.mwb.

The SQL Script after adding 4 records to each table is shown as the following:

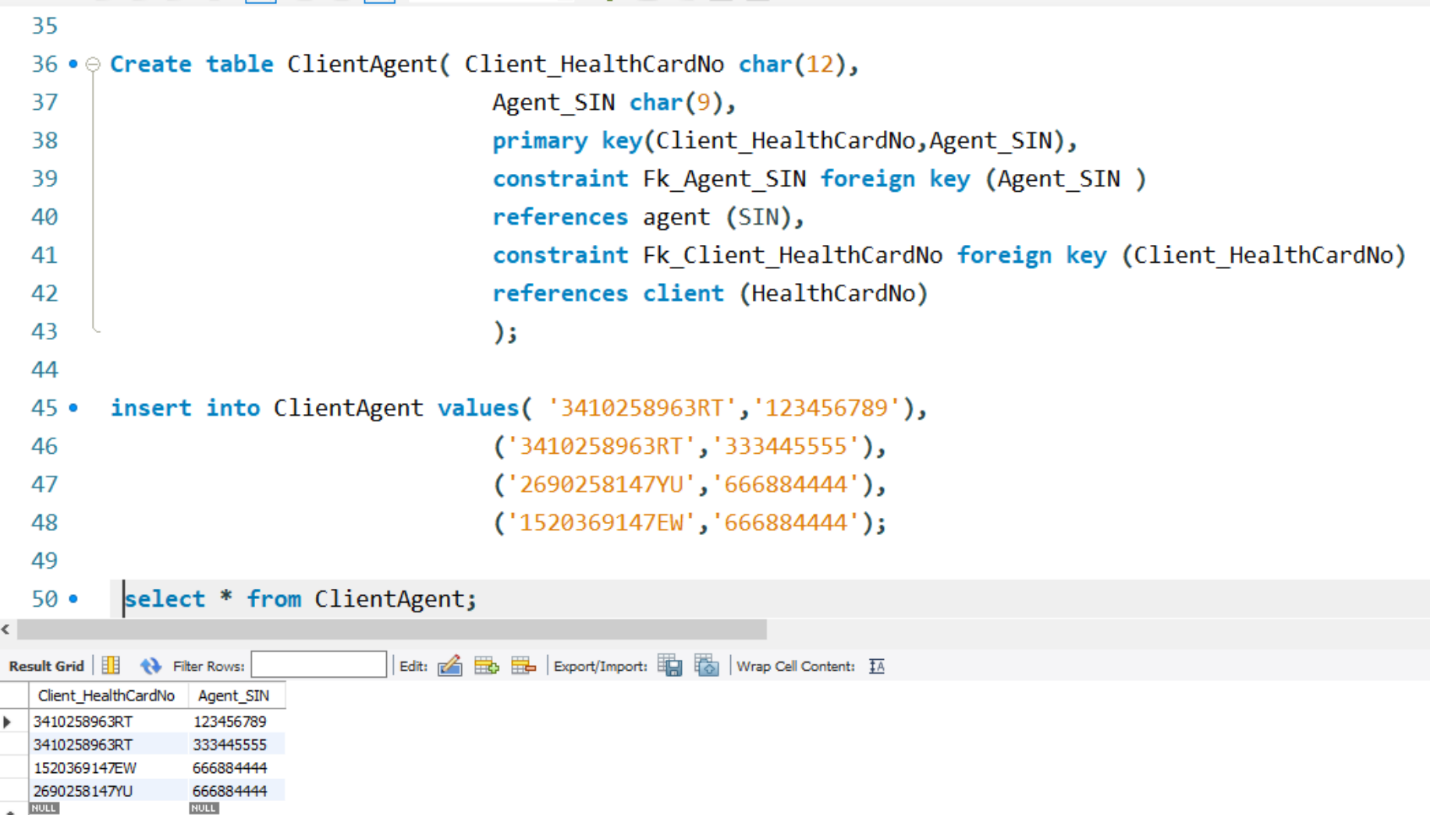
**Client Table:**



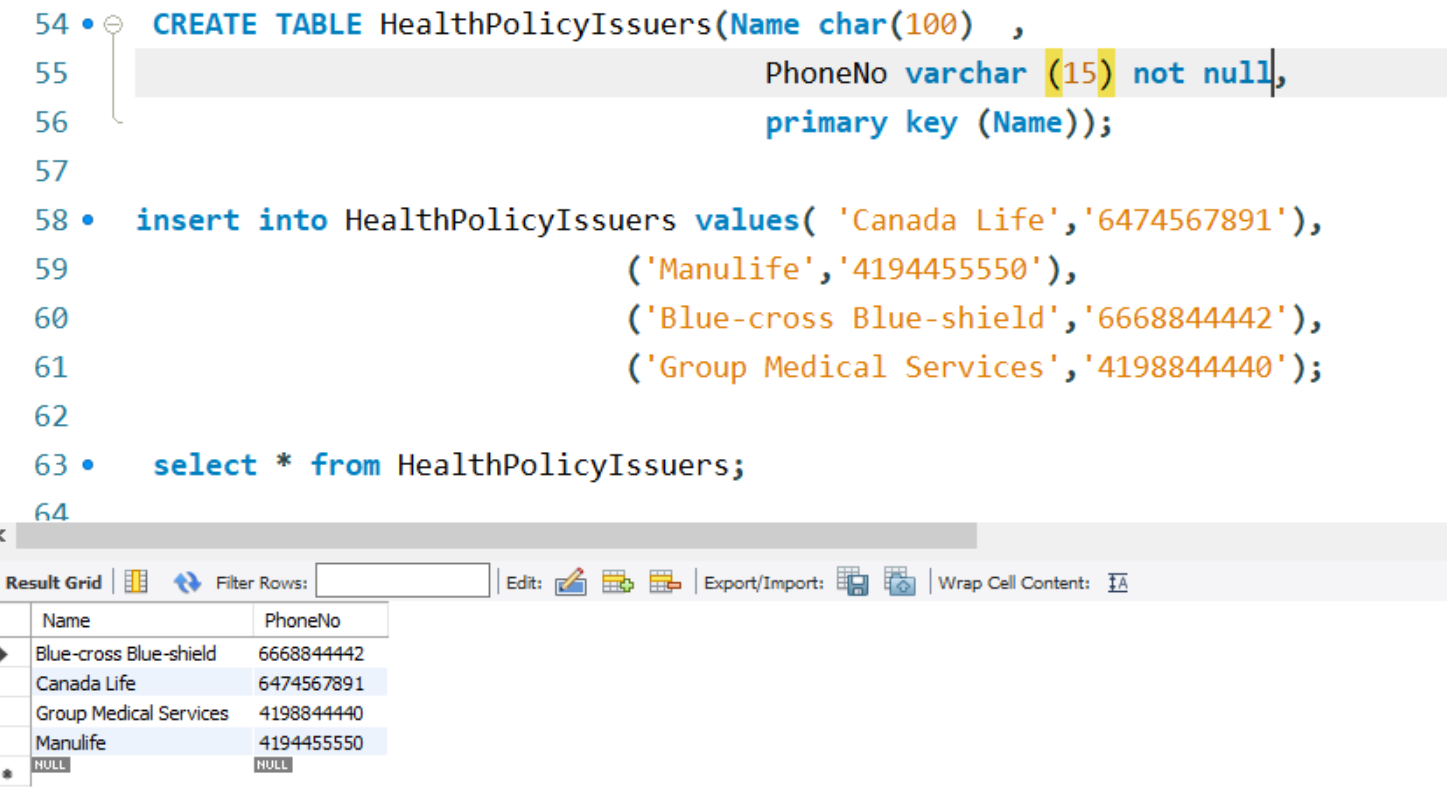
**Agent Table:**



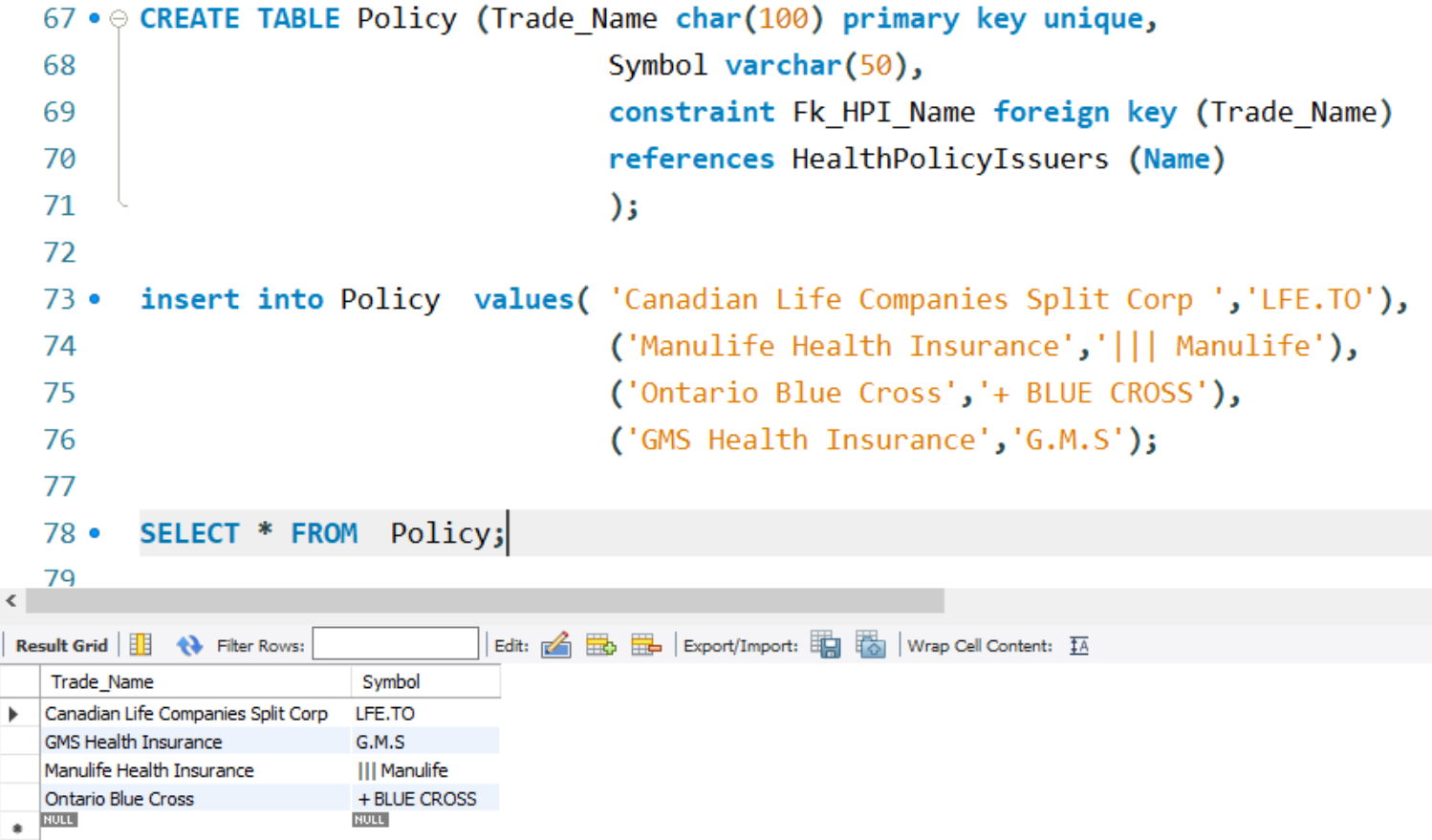
**ClientAgent Table:**

****

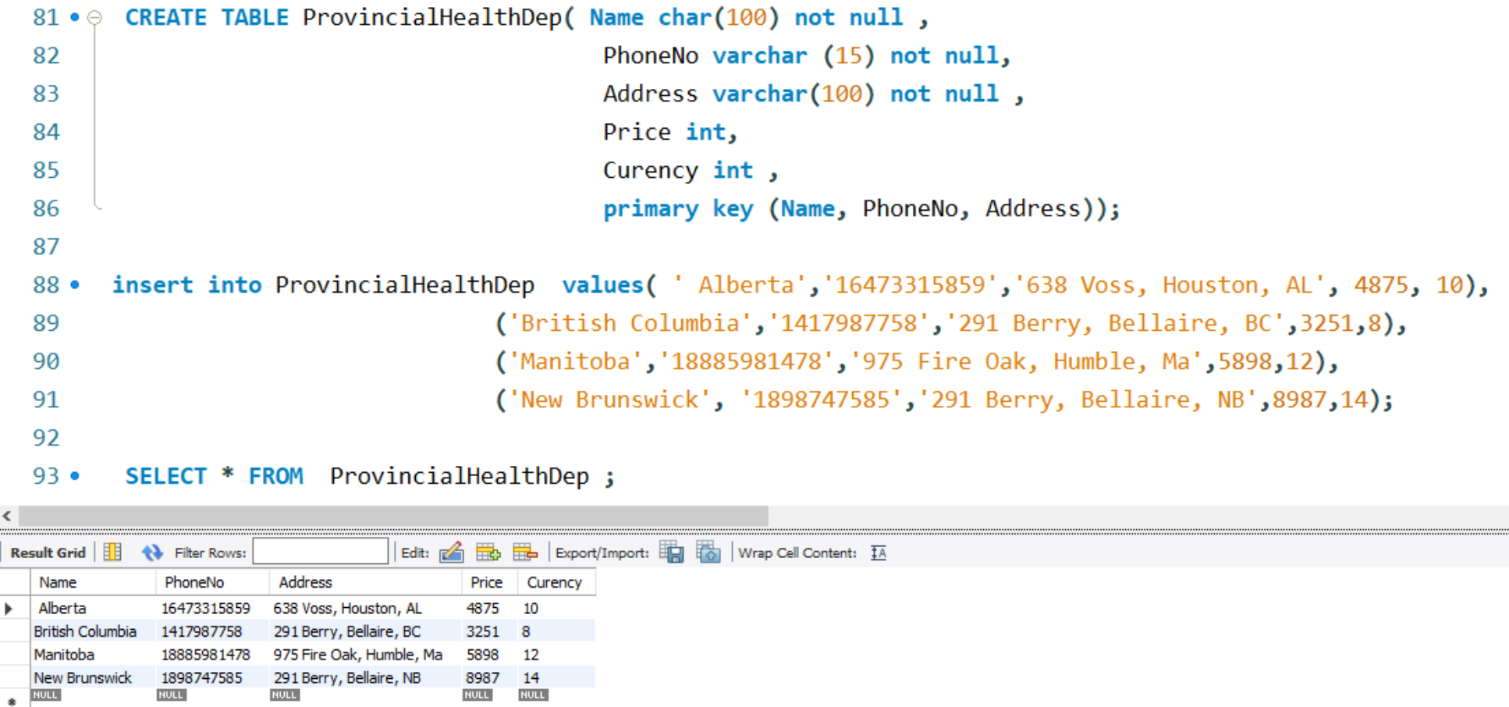
**HealthPolicyIssuers Table:**



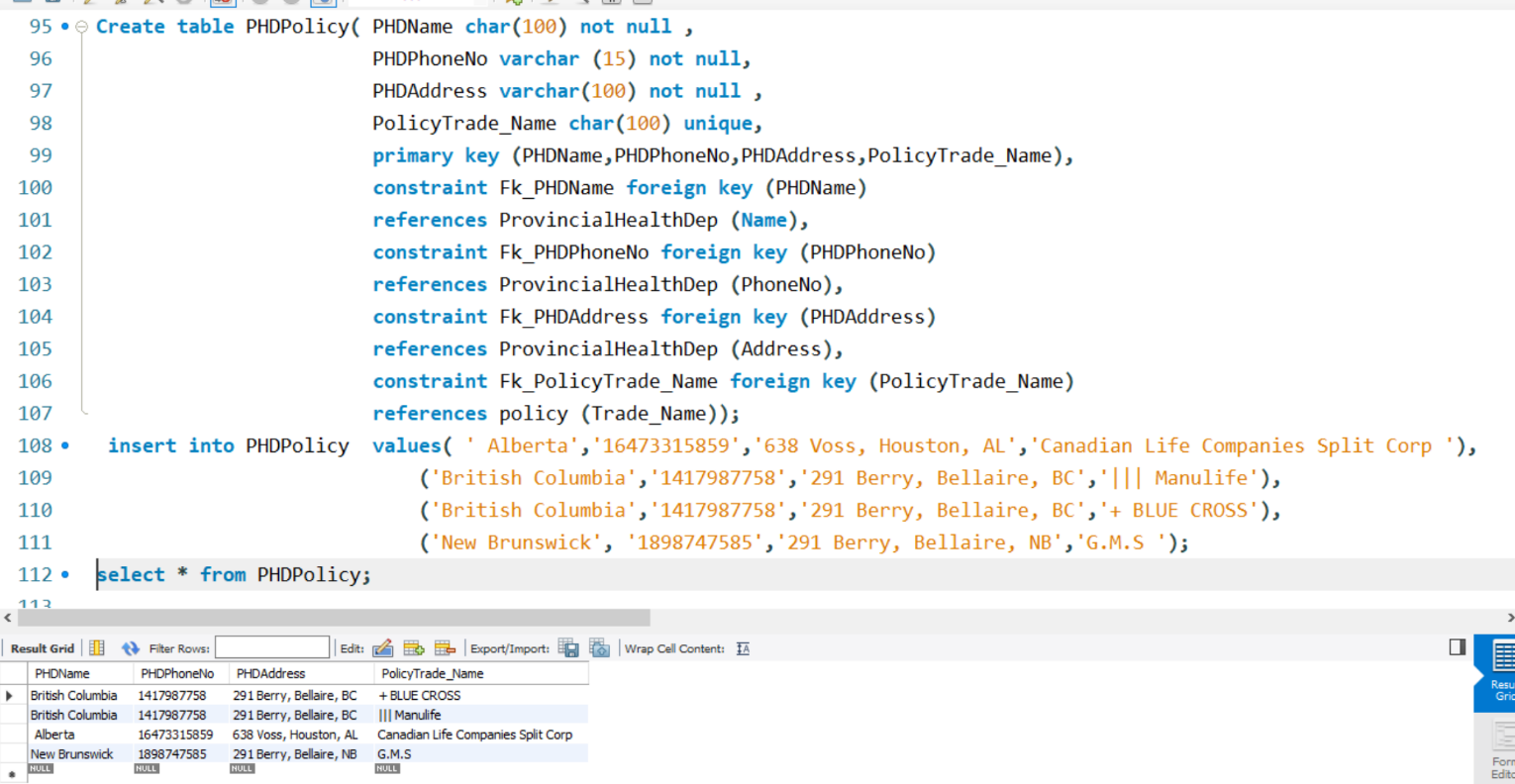
**Policy Table:**

****

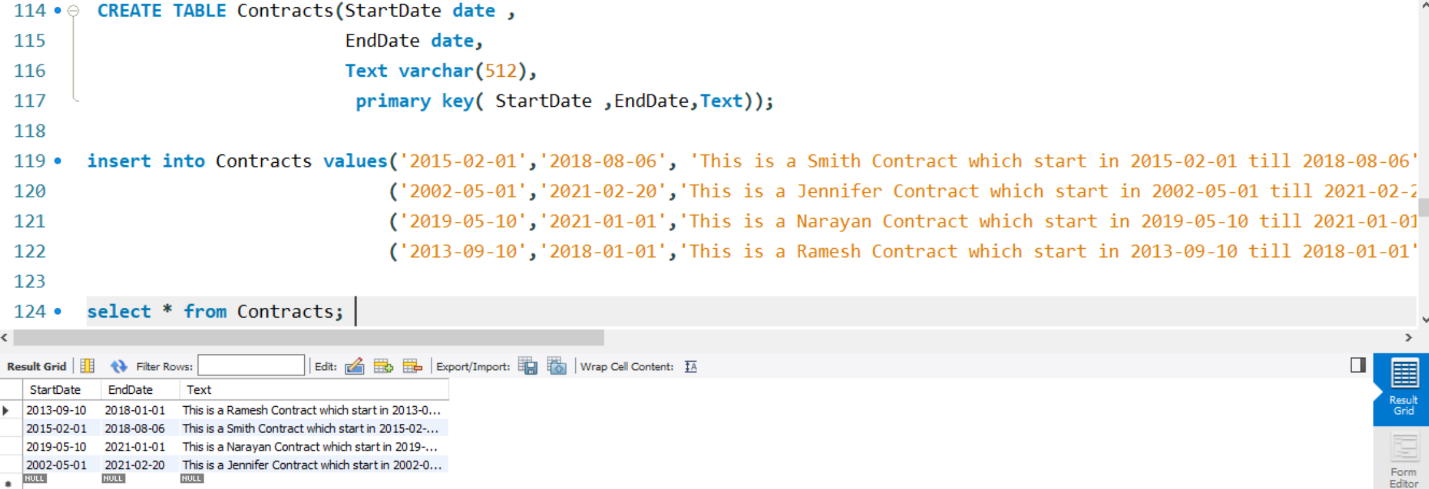
**ProvincialHealthDep** **Table:**



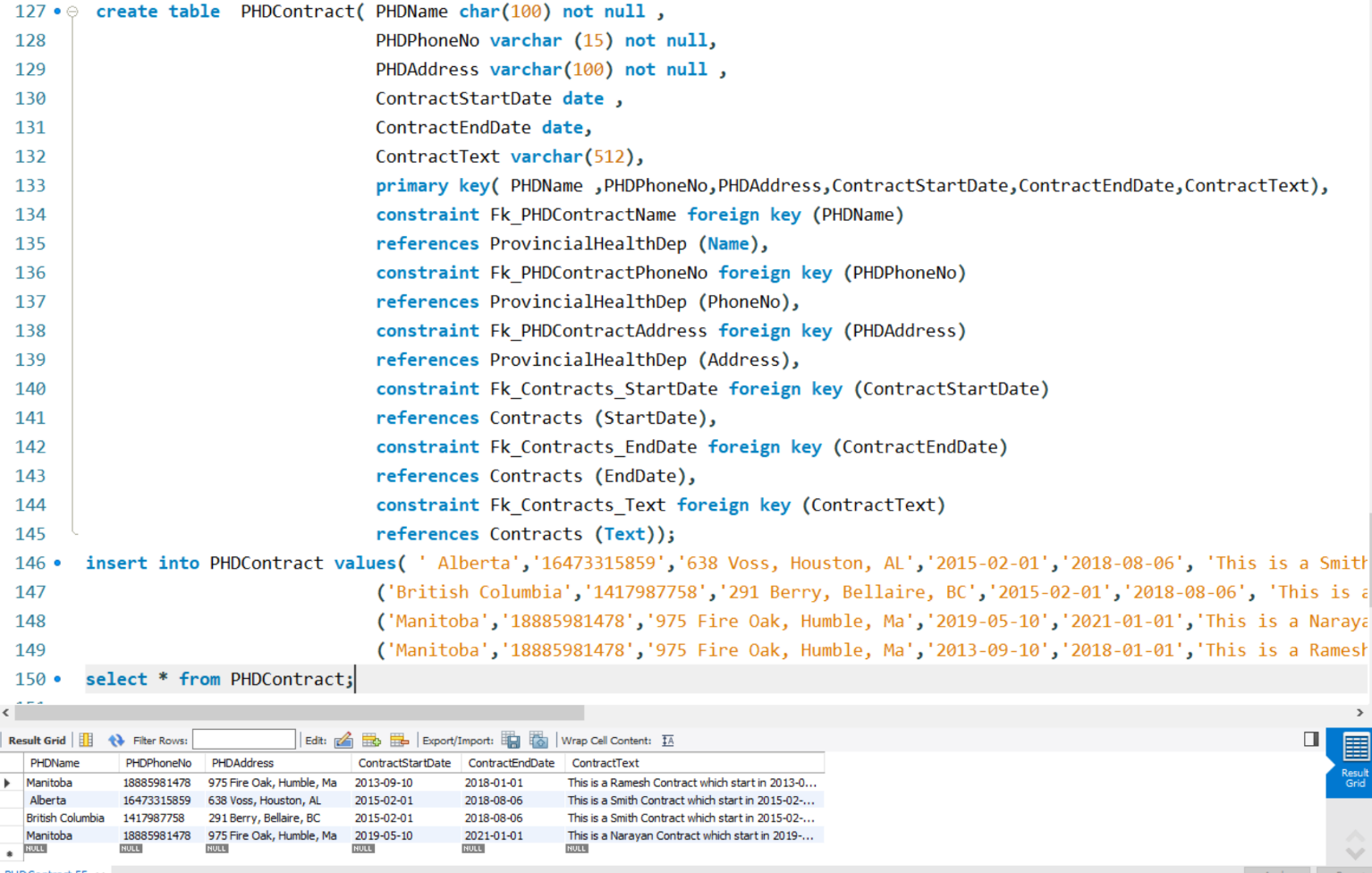
**PHDPolicy Table:**

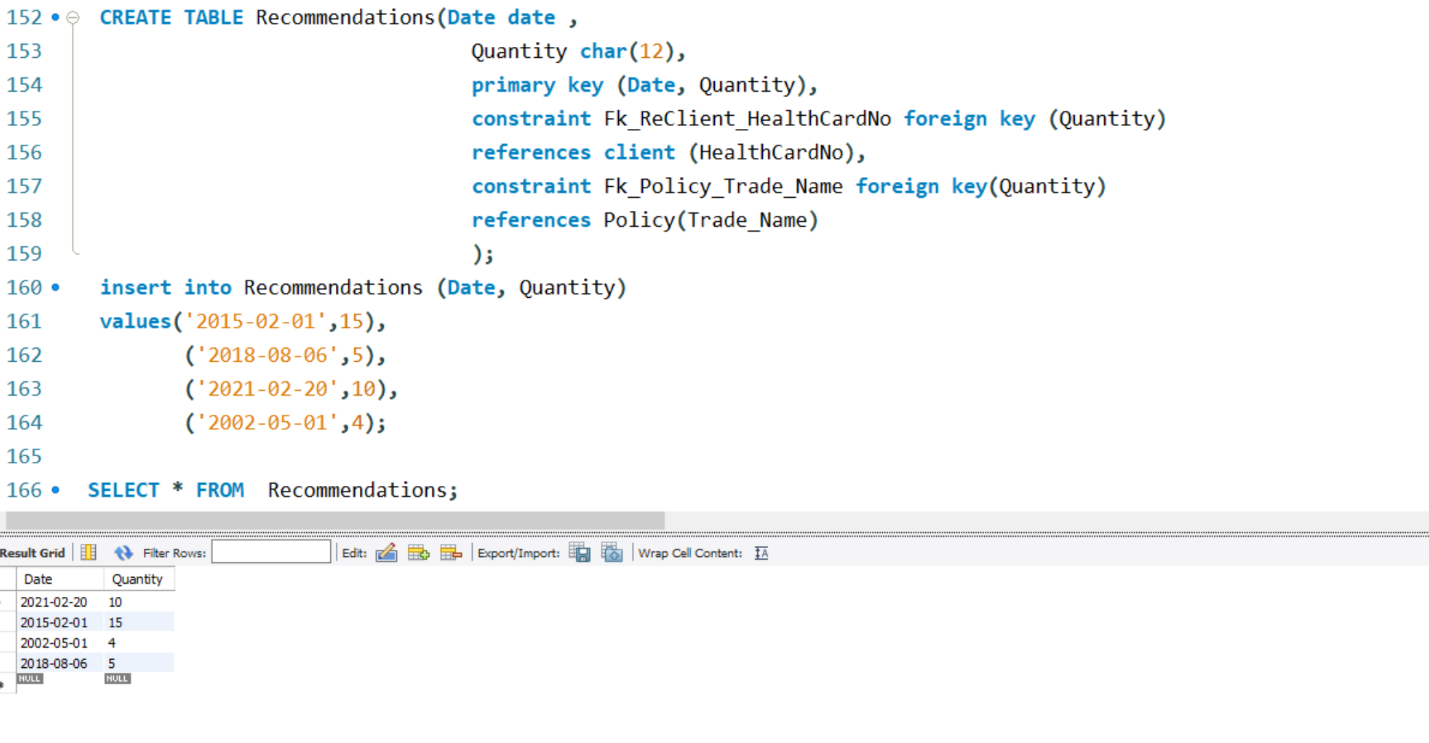
****

**Contracts Table:**

****

**PHDContract Table:**

****

**Recommendations Table: **

**EER Diagram**

