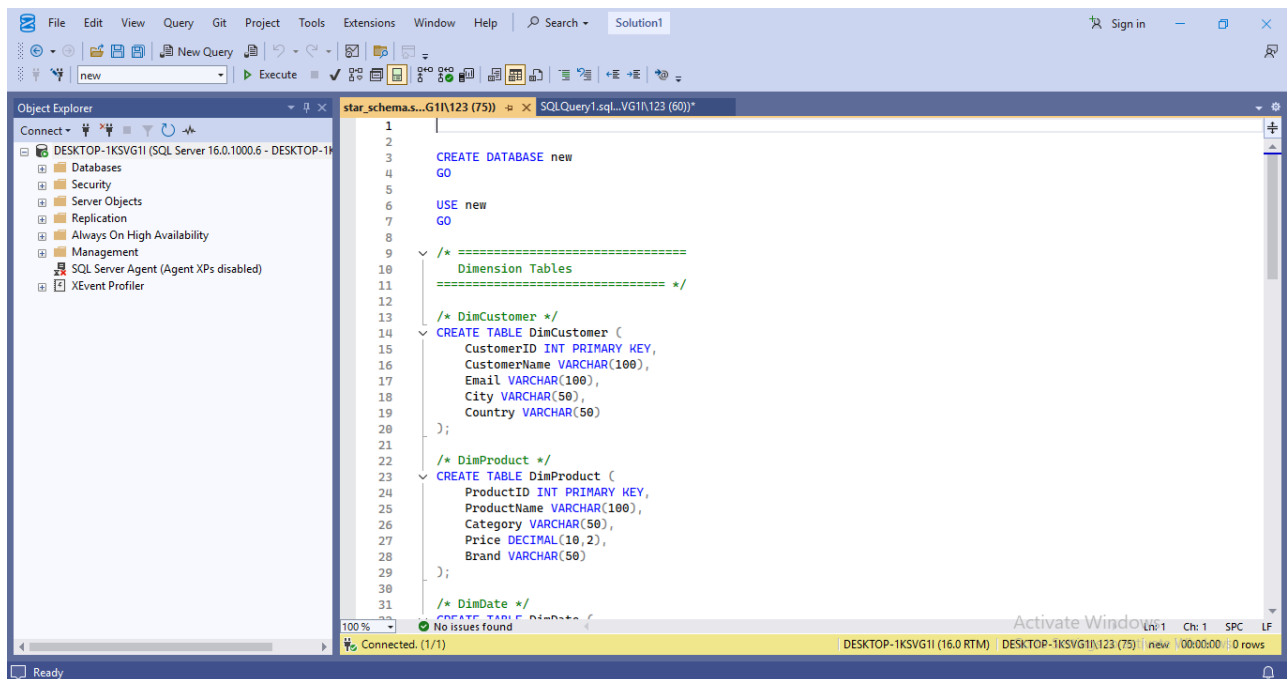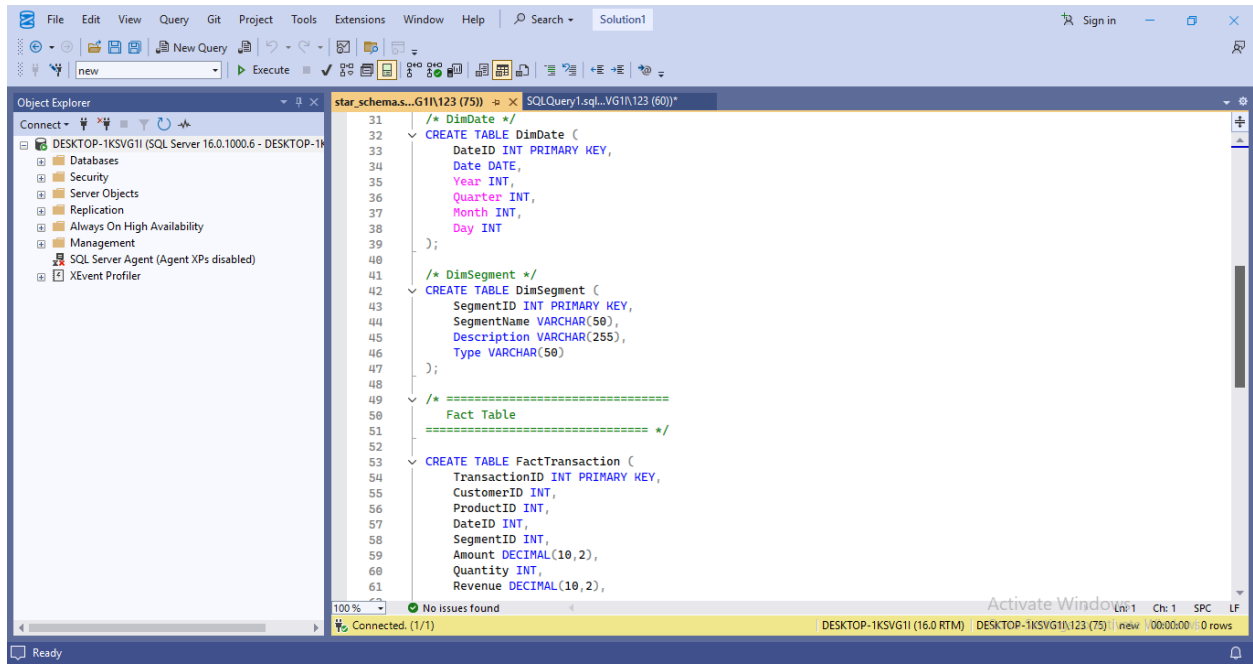# Star Schema

This diagram represents a **Star Schema** design used in a Sales/Data Warehouse environment. The star schema is optimized for reporting and analytics, with a central **Fact table** connected to multiple **Dimension tables**.
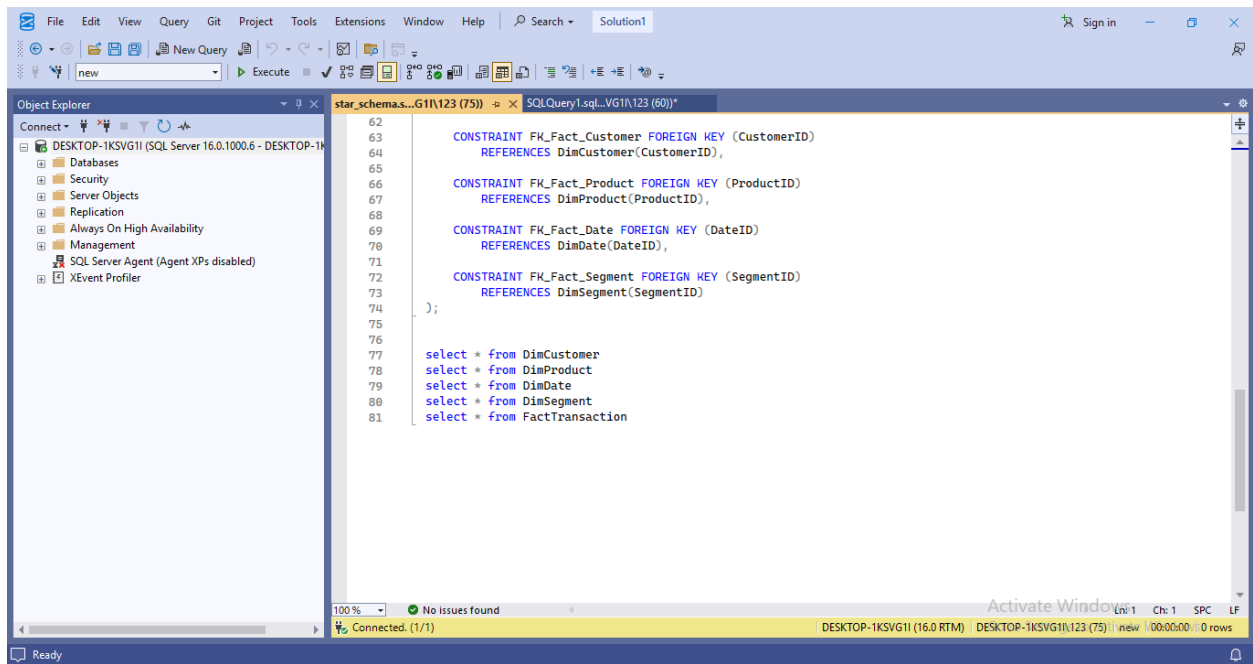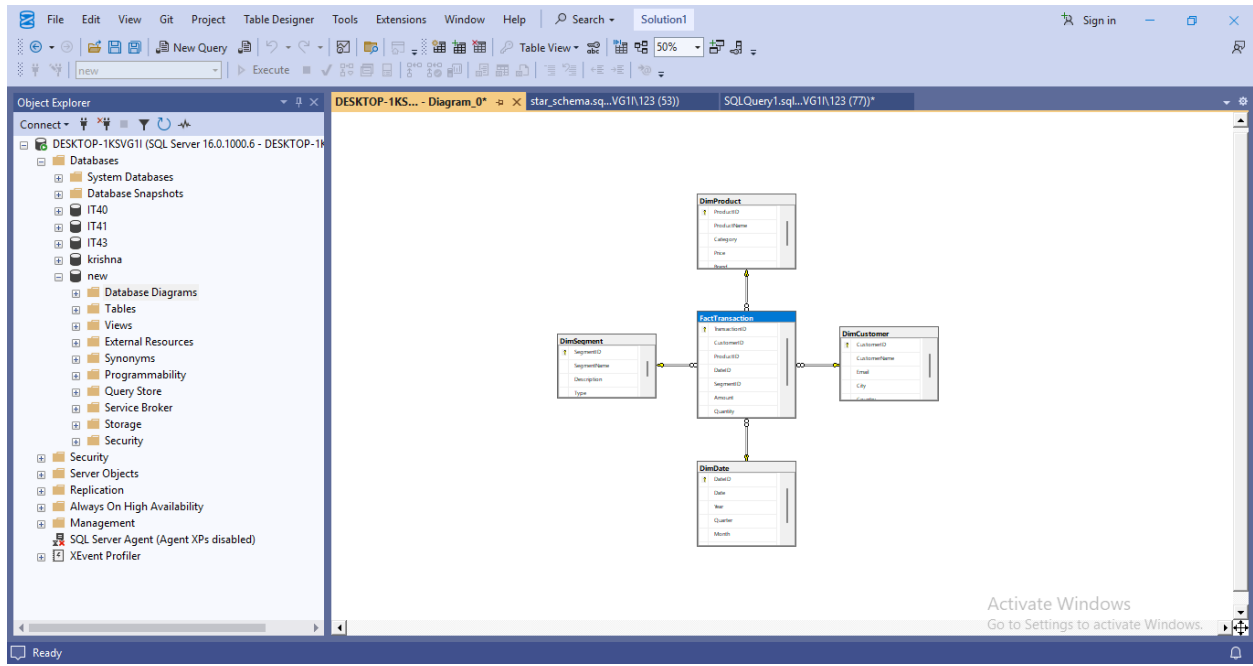
Screenshot:

1)

2)


```sql
     /* DimDate */
     CREATE TABLE DimDate (
         DateID INT PRIMARY KEY,
         Date DATE,
         Year INT,
         Quarter INT,
         Month INT,
         Day INT
     );

     /* DimSegment */
     CREATE TABLE DimSegment (
         SegmentID INT PRIMARY KEY,
         SegmentName VARCHAR(50),
         Description VARCHAR(255),
         Type VARCHAR(50)
     );

     /* =============================
        Fact Table
        ============================= */

     CREATE TABLE FactTransaction (
         TransactionID INT PRIMARY KEY,
         CustomerID INT,
         ProductID INT,
         DateID INT,
         SegmentID INT,
         Amount DECIMAL(10,2),
         Quantity INT,
         Revenue DECIMAL(10,2),
```

3)


```sql
         CONSTRAINT FK_Fact_Customer FOREIGN KEY (CustomerID)
             REFERENCES DimCustomer(CustomerID),

         CONSTRAINT FK_Fact_Product FOREIGN KEY (ProductID)
             REFERENCES DimProduct(ProductID),

         CONSTRAINT FK_Fact_Date FOREIGN KEY (DateID)
             REFERENCES DimDate(DateID),

         CONSTRAINT FK_Fact_Segment FOREIGN KEY (SegmentID)
             REFERENCES DimSegment(SegmentID)
     );


     select * from DimCustomer
     select * from DimProduct
     select * from DimDate
     select * from DimSegment
     select * from FactTransaction
```

4)

Thank You