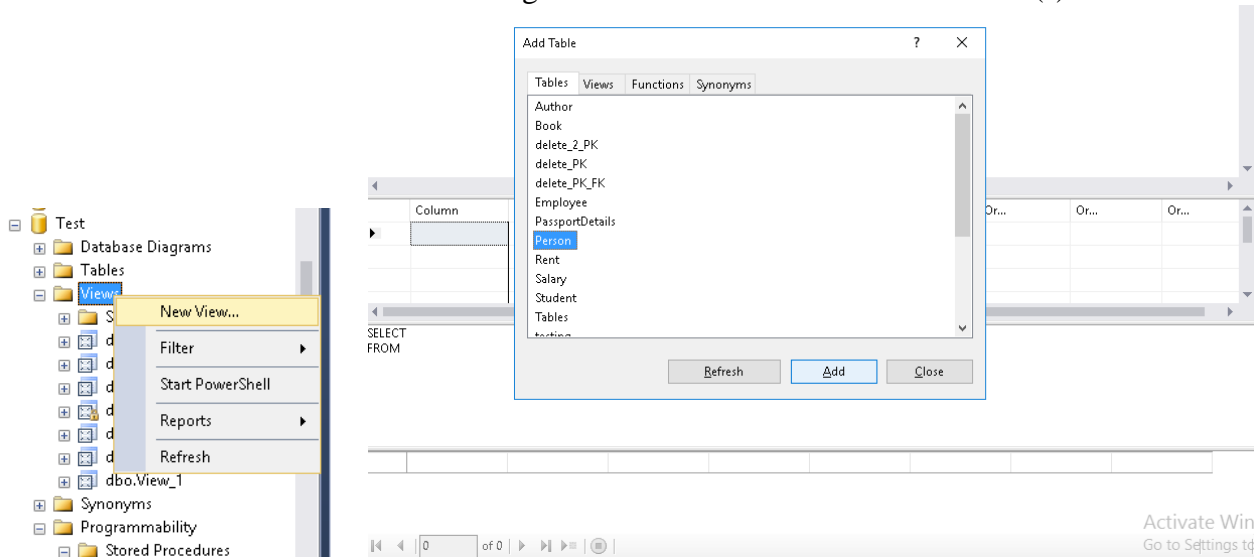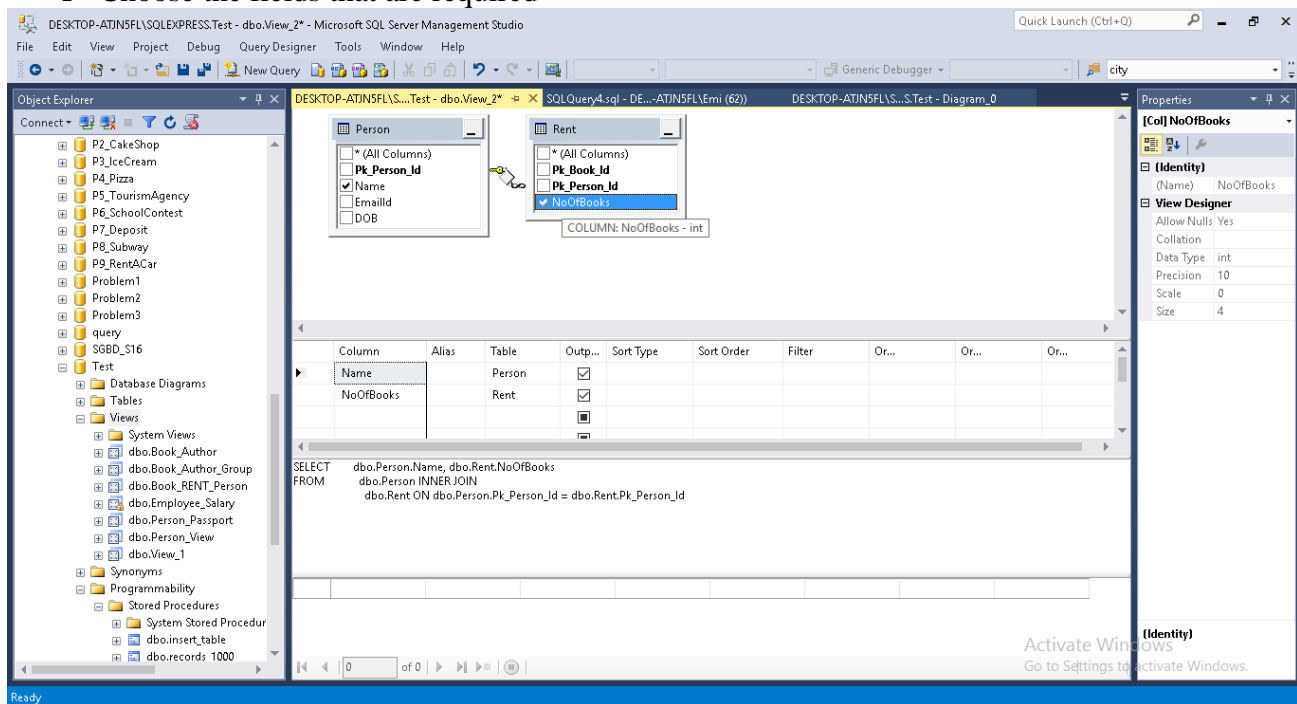# SQL Views (Virtual Tables)

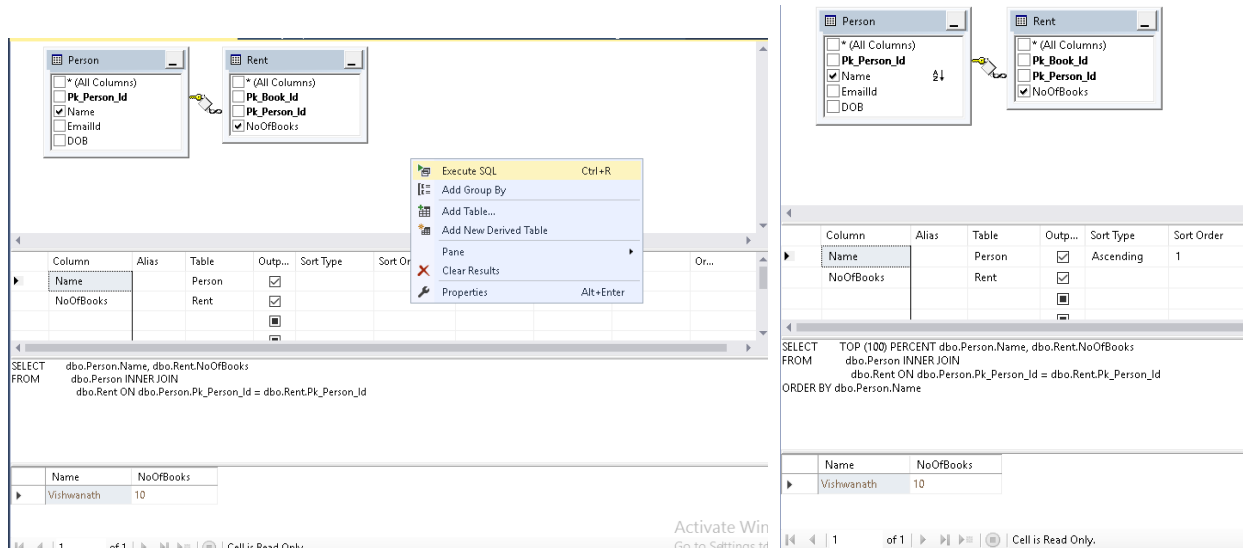## I. Create a view from Design View

➔ Select the database -> Views -> right click -> New View -> Add the table(s) one needs

➔ Choose the fields that are required

-> Run the query – right click

➔ The clause ORDER BY – can be use only in combination with TOP

II. SQL CREATE VIEW

- A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables in the database. You can add SQL functions, WHERE, and JOIN statements to a view and present the data as if the data were coming from one single table. A view always shows up-to-date data! The database engine recreates the data, using the view's SQL statement, every time a user queries a view.

Create	*Update*	*Delete*
CREATE VIEW view_name AS SELECT column_name(s) FROM table_name WHERE condition	*CREATE OR REPLACE VIEW view_name AS SELECT column_name(s) FROM table_name WHERE condition*	*DROP VIEW view_name*

Examples:

View	View Run (in a New Query)
/* select every product in the "Products" table with a unit price higher than the average unit price */ CREATE VIEW [Products Above Average Price] AS SELECT ProductName, UnitPrice FROM Products WHERE UnitPrice>(SELECT AVG(UnitPrice) FROM Products)	/* query the view above */ SELECT * FROM [Products Above Average Price]
/* calculates the total sale for each category in 1997 (this view selects its data from another view called "Product Sales for 1997") */ CREATE VIEW [Category Sales For 1997] AS	SELECT * FROM [Category Sales For 1997] /* add a condition to the query - see the total sale only for the category "Beverages" */

SELECT DISTINCT CategoryName, Sum(ProductSales) AS CategorySales FROM [Product Sales for 1997] GROUP BY CategoryName	SELECT * FROM [Category Sales For 1997] WHERE CategoryName='Beverages'
/* add the "Category" column to the "Current Product List" view */ CREATE OR REPLACE VIEW [Current Product List] AS SELECT ProductID, ProductName, Category FROM Products WHERE Discontinued=No	SELECT * FROM [Current Product List]
/* delete a view */ DROP VIEW [Current Product List]	

Bibliografy:
http://www.w3schools.com/sql/sql_view.asp
https://www.techonthenet.com/sql/views.php