

<b>Cloud Databases</b> Diploma in IT, DS 2025/26 Semester 4,6	<b>Week 1</b> <b>1 hour</b>
<b>Week 1 : Views</b>	

<b>Student ID</b>	
<b>Student Name</b>	

## OBJECTIVES

At the end of this practical, you should know how to create and use Views.

## REFERENCES

Please refer to [Microsoft Transact-SQL Reference](#) for T-SQL programming constructs. According to the SQL standard, a view (*strictly, a view definition*) is a named query, that may for many purposes be used in the same way as a base table. Its value is the result of evaluating the query.

## ACTIVITIES

### Part 1

1. Launch SQL Server Management Studio and login using “Windows authentication”.
2. Download the **CDBBookDB.sql** from Brightspace under Week 1 Teaching Materials onto your notebook. Load the script **CDBBookDB.sql** by clicking **File > Open > File...** option in SQL Server Management Studio and browse to the where the file is located.

Press **F5** on your keyboard or click the **Execute** button on the SQL Server Management Studio to create the database, database tables and data.

3. You have created three tables in your database: Category, Publisher and Title. These tables are simplified to serve the purpose of CDB practical.

**Category** Table stores the different categories of title that are available.

Column Name	Data Type	Null Allowed	Column Description
CatID	int	No	Category ID. Auto-generated
CatDesc	varchar(20)	No	Category Description

**Publisher** Table stores the list of publishers who supplied the titles.

Column Name	Data Type	Null Allowed	Column Description
PubID	int	No	Publisher ID
PubName	varchar(50)	No	Publisher Name
Address	varchar(50)	No	Address of publisher
ContactNo	char(8)	Yes	Contact number

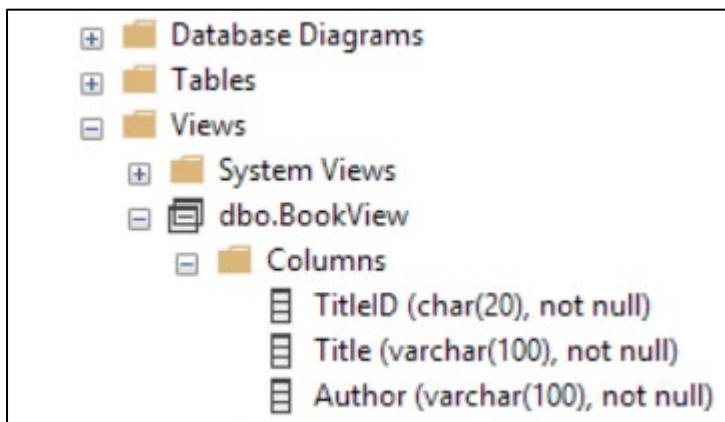
**Title** Table stores the book titles that are available.

Column Name	Data Type	Null Allowed	Column Description
TitleID	char(20)	No	Title ID of book
Title	varchar(100)	No	Title of book
CatID	int	No	Category of the book
Author	varchar(100)	No	Author(s) of the book
Price	money	No	Selling price of the book
PubID	int	No	Publisher Id of the book
PubDate	datetime	No	Publication date of the book

## Part 2

1. Create a view *BookView* that should include the following attributes: title id, title, and author.

Expand the Views folder in Object Explorer and find the details of the *BookView* created.



2. Write a query to retrieve all the information in the view *BookView*.
3. Write a query to retrieve only the details of books authored by 'Lim Hong' in the view *BookView*.

## Part 3

The useful information related to titles may require two inner join clauses in a query to obtain the attributes from three tables: Category, Publisher and Title. By creating a view that has these attributes would remove the need to construct the inner join clause(s) in a query to retrieve the title information.

1. Create a view *TitleView* that should include the following attributes: title id, title, category description, author, price, publisher's name, and published date.
2. Write a query to retrieve all the information in the view *TitleView*.
3. Using the view *TitleView*, write a query to update the price for the title 'Singapore Jokes' to \$15.00.

Hint: the update command on view is the same format as the update command on database table.

4. Write a query to retrieve all information in the view *TitleView* and the table *Title* to note the changes committed in Step 3.
5. Issue an update command to update both title and category description of the title 'Singapore Jokes' to 'Singapore Humour' and 'Humour' in a single update command. What was the response from SQL server and why it occurs?

**Submission:**

Include your name and student id as comments in the SQL script. Save your answers in a file called **Views.sql** and deposit it in **PoliteMall**.