# Links

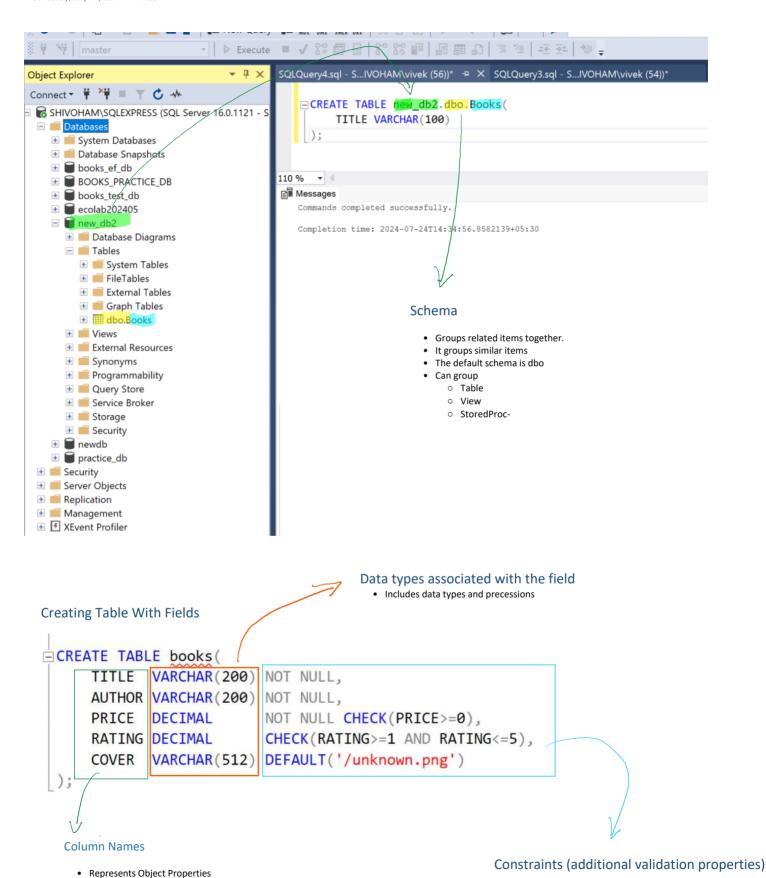
Wednesday, July 24, 2024 10:39 AM

This Notebook: <a href="https://ldrv.ms/o/s!AknT1SrRpCz-xvJQXWnhOEQjO7vKwA?e=Vz65A7">https://ldrv.ms/o/s!AknT1SrRpCz-xvJQXWnhOEQjO7vKwA?e=Vz65A7</a>

GitHub: vivekduttamishra/202407-g7cr-sqlserver (github.com)

# **DBMS**

Wednesday, July 24, 2024 10:46 AM

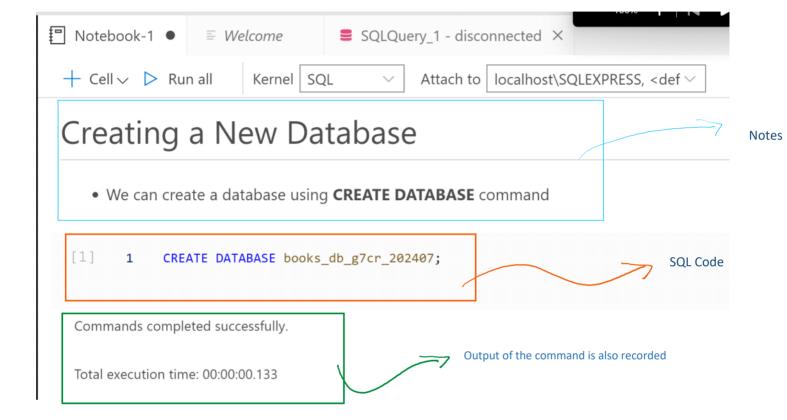


NOT NULL

### Azure Studio Notebook

Wednesday, July 24, 2024 3:17 PM

- A Jupyter style notebook for SqlSever
  - Jupyter is quite popular with Python developers
- Allows us to record
  - Notes
  - Codes
  - o Code Output



Wednesday, July 24, 2024 3:30 PM

#### Approach #1 Provide Column Name And values

Values must be provided in the same order as column name

```
[4] 1 INSERT
2 INTO BOOKS(TITLE, AUTHOR, PRICE, RATING, COVER)
3 VALUES ('The Accursed God', 'Vivek Dutta Mishra', 299, 4.7, 'tag.png');

SQL

Success
```

#### Approach #2 Provide Only Values

```
1
                INSERT
          2
                     INTO BOOKS
                                 ('Manas','Vivek Dutta Mishra',199, 4.6, 'manas.png');
           3
                     VALUES
  (1 row affected)

    Column Name will be in the same order as Create Table definition

CREATE TABLE books
      TITLE WARCHAR (200) NOT NULL,
AUTHOR VARCHAR (200) NOT NULL,
      PRICE DECIMAL
                                NOT NULL CHECK(PRICE>=0),
      RATING DECIMAL
                                CHECK(RATING>=1 AND RATING<=5),</pre>
      COVER VARCHAR(512) DEFAULT('/unknown.png')
);
```

### Insert with constraint failure results in error

```
1
            INSERT
[19]
                INTO BOOKS(TITLE, PRICE, RATING)
                VALUES
                          ('Rashmirathi',299, 4.7);
                                                                                                                                                                      SQL
Msg 515, Level 16, State 2, Line 1
Cannot insert the value NULL into colum
                                             'AUTHOR
                                                       table 'books_db_g7cr_202407.dbo.books'; column does not allow nulls. INSERT fails.
The statement has been terminated
Total execution time: 00:00:00.003
              \wedge
                INTO BOOKS(TITLE, AUTHOR, PRICE, RATING)
       3
                VALUES
                         ('Rashmirathi', 'Ramdhari Singh Dinkar', 299, 10);
                                                                                                                                                                      SQL
Msg 547, Level 16, State 0, Line 1
The INSERT statement conflicted with the CHECK co
                                                                           RATING
                                                                                    5165187F". The conflict occurred in database "books_db_g7cr_202407", table
"dbo.books", column 'RATING'.
The statement has been terminated
```

"dbo.books", column 'RATING'.

The statement has been terminated.

Total execution time: 00:00:00.004

## Group By Query

Wednesday, July 24, 2024 5:03 PM

- Group By Splits The Given Table into multiple Sub Tables based on a Unique Key
- For Example
  - We can group our Books By Author
  - Now our table will logically split into multiple tables on for each author
- Now We return result that will have
  - o 1 row information for each group.

## **Group By Author**

- There will be on group of rows per distinct author
- The Query will return a result where each group will be represented by a single row
  - o Irrespective of the number of rows present in the group



We can't add anything which has multiple values

- o Example

Alexandre Dumas

Anant Neelkanthan

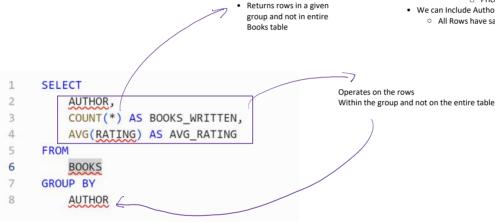
Ramdhari Singh

Vivek Dutta Mishra

JK Rowling

Dinkar

- ☐ Each group has more than 1 title. We can't include in a single row
- Same goes for
- ☐ Price, Cover, Rating
- We can Include Author (Group Key)
  - o All Rows have same Author.



5:59 PM

