

Advandce Database

TSQL and Statement SELECT, Sorting, Filtering, Grouping and Union Operator



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Practicum - Part 1

1. The difference is that the first query select every part using the wildcard symbol and the second query declared every column to be displayed sequentially

Practicum - Part 2

2. Yes, because the query ask for the data in column country on every row.



The screenshot displays the 'Results' pane of SQL Server Enterprise Manager. It shows a table with 19 rows and one column named 'country'. The first row is highlighted with a dashed border. Below the table, a yellow status bar indicates 'Query executed successfully.' with a green checkmark icon.

	country
1	Germany
2	Mexico
3	Mexico
4	UK
5	Sweden
6	Germany
7	France
8	Spain
9	France
10	Canada
11	UK
12	Argentina
13	Mexico
14	Switzerland
15	Brazil
16	UK
17	Germany
18	France
19	UK

✓ Query executed successfully.

-
3. No, the difference is how the 4th step query result is unique and there is no duplicate data. From the experiment it can be concluded that the DISTINCT keyword is used to query data without any duplicate data.

Results		Messages
	country	
1	Argentina	
2	Austria	
3	Belgium	
4	Brazil	
5	Canada	
6	Denmark	
7	Finland	
8	France	
9	Germany	
10	Ireland	
11	Italy	
12	Mexico	
13	Norway	
14	Poland	
15	Portugal	
16	Spain	
17	Sweden	
18	Switzerland	
19	UK	

 Query executed successfully.

Practicum - Part 3

4. The column name of the query is different. The AS keyword is used to make an alias to the name of the table and column such that you can represent the table/column with the alias declared with the AS keyword.

Results		Messages	
	contactname	contacttitle	
1	Allen, Michael	Sales Representative	
2	Hassall, Mark	Owner	
3	Peoples, John	Owner	
4	Amdt, Torsten	Sales Representative	
5	Higginbotham, Tom	Order Administrator	
6	Poland, Carole	Sales Representative	
7	Bansal, Dushyant	Marketing Manager	
8	Ilyina, Julia	Owner	
9	Raghav, Amritansh	Owner	
10	Bassols, Pilar Colome	Accounting Manager	
11	Jaffe, David	Sales Representative	
12	Ray, Mike	Sales Agent	
13	Benito, Almudena	Marketing Manager	
14	Jelitto, Jacek	Owner	
15	Richardson, Shawn	Sales Associate	
16	Birkby, Dana	Sales Representative	
17	Jones, TiAnna	Order Administrator	
18	Rizaldy, Arif	Owner	
19	Boseman, Randall	Sales Agent	

Query executed successfully.

Results		Messages	
	Name	Title	Company Name
1	Allen, Michael	Sales Representative	Customer NRZBB
2	Hassall, Mark	Owner	Customer MLTDN
3	Peoples, John	Owner	Customer KBUDE
4	Amdt, Torsten	Sales Representative	Customer HFBZG
5	Higginbotham, Tom	Order Administrator	Customer HGV LZ
6	Poland, Carole	Sales Representative	Customer XHXJV
7	Bansal, Dushyant	Marketing Manager	Customer QXVLA
8	Ilyina, Julia	Owner	Customer QUHWH
9	Raghav, Amritansh	Owner	Customer RTXGC
10	Bassols, Pilar Colome	Accounting Manager	Customer EEALV
11	Jaffe, David	Sales Representative	Customer UBHAU
12	Ray, Mike	Sales Agent	Customer PSNMQ
13	Benito, Almudena	Marketing Manager	Customer VMLOG
14	Jelitto, Jacek	Owner	Customer WNMAF
15	Richardson, Shawn	Sales Associate	Customer JUWXX
16	Birkby, Dana	Sales Representative	Customer GYBBY
17	Jones, TiAnna	Order Administrator	Customer FEVNN
18	Rizaldy, Arif	Owner	Customer BSVAR
19	Boseman, Randall	Sales Agent	Customer RFNQC

Query executed successfully.

Practicum - Part 4

5. step 3 query has an extra column of category name. CASE keyword seems to work like switch case, for multiple similar condition to output different result.

Results

Messages

	categoryid	productname
1	1	Product HHYDP
2	1	Product RECZE
3	2	Product IMEHJ
4	2	Product KSBRM
5	2	Product EPEIM
6	2	Product VAIIV
7	7	Product HMLNI
8	2	Product WVJFP
9	6	Product AOZBW
10	8	Product YHXGE
11	4	Product QMVUN
12	4	Product OSFNS
13	8	Product POXFU
14	7	Product PWCJB
15	2	Product KSZOI
16	3	Product PAFRH
17	6	Product BLCAX
18	8	Product CKEDC
19	3	Product XKXDO

Results

Messages

	categoryid	productname	categoryname
1	1	Product HHYDP	Beverages
2	1	Product RECZE	Beverages
3	2	Product IMEHJ	Condiments
4	2	Product KSBRM	Condiments
5	2	Product EPEIM	Condiments
6	2	Product VAIIV	Condiments
7	7	Product HMLNI	Produce
8	2	Product WVJFP	Condiments
9	6	Product AOZBW	Meat/Poultry
10	8	Product YHXGE	Seafood
11	4	Product QMVUN	Dairy Products
12	4	Product OSFNS	Dairy Products
13	8	Product POXFU	Seafood
14	7	Product PWCJB	Produce
15	2	Product KSZOI	Condiments
16	3	Product PAFRH	Confections
17	6	Product BLCAX	Meat/Poultry
18	8	Product CKEDC	Seafood
19	3	Product XKXDO	Confections

✓ Query executed successfully.

✓ Query executed successfully.

6. An extra column detailing if the product is a champaign product or not

Results Messages				
	categoryid	productname	categoryname	iscampaign
1	1	Product HHYDP	Beverages	Champaign Products
2	1	Product RECZE	Beverages	Champaign Products
3	2	Product IMEHJ	Condiments	Non-Champaign Products
4	2	Product KSBRM	Condiments	Non-Champaign Products
5	2	Product EPEIM	Condiments	Non-Champaign Products
6	2	Product VAIIV	Condiments	Non-Champaign Products
7	7	Product HMLNI	Produce	Champaign Products
8	2	Product WVJFP	Condiments	Non-Champaign Products
9	6	Product AOZBW	Meat/Poultry	Non-Champaign Products
10	8	Product YHXGE	Seafood	Champaign Products
11	4	Product QMVUN	Dairy Products	Non-Champaign Products
12	4	Product OSFNS	Dairy Products	Non-Champaign Products
13	8	Product POXFU	Seafood	Champaign Products
14	7	Product PWCJB	Produce	Champaign Products
15	2	Product KSZOI	Condiments	Non-Champaign Products
16	3	Product PAFRH	Confections	Non-Champaign Products
17	6	Product BLCAX	Meat/Poultry	Non-Champaign Products
18	8	Product CKEDC	Seafood	Champaign Products
19	3	Product XKXDO	Confections	Non-Champaign Products

✓ Query executed successfully.

7. 12 row affected

```
1  SELECT
2      p.categoryid , p.productname,
3      CASE
4          WHEN p.categoryid = 1 THEN 'Beverages'
5          WHEN p.categoryid = 2 THEN 'Condiments'
6          WHEN p.categoryid = 3 THEN 'Confections'
7          WHEN p.categoryid = 4 THEN 'Dairy Products'
8          WHEN p.categoryid = 5 THEN 'Grains/Cereals'
9          WHEN p.categoryid = 6 THEN 'Meat/Poultry'
10         WHEN p.categoryid = 7 THEN 'Produce'
11         WHEN p.categoryid = 8 THEN 'Seafood'
12         ELSE 'Other'
13     END AS categoryname,
14     CASE
15         WHEN p.categoryid IN (1, 7, 8) THEN 'Champaign
16             ↳ Products'
17         ELSE 'Non-Champaign Products'
18     END AS iscampaign
19 FROM [Production].[Products] AS p
20 WHERE p.categoryid = 8;
```

Results Messages					Results Messages				
ID_KATEGORI	NAMA_PRODUK	NAMA_KATEGORI	STATUS		(12 rows affected)				
8	Product YHXGE	Seafood	Champaign Products		Completion time: 2023-10-12T13:14:29.5830698+07:00				
8	Product POXFU	Seafood	Champaign Products						
8	Product CKEDC	Seafood	Champaign Products						
8	Product LYERX	Seafood	Champaign Products						
8	Product GMKIJ	Seafood	Champaign Products						
8	Product EVFFA	Seafood	Champaign Products						
8	Product YZIXQ	Seafood	Champaign Products						
8	Product TTEEX	Seafood	Champaign Products						
8	Product AQOKR	Seafood	Champaign Products						
8	Product CBRRL	Seafood	Champaign Products						
8	Product ACRVI	Seafood	Champaign Products						
8	Product WEUJZ	Seafood	Champaign Products						

100 %

Query executed successfully.

Query executed successfully.

8. -

```
1  SELECT
2      h.firstname AS FIRST_NAME,
3      h.lastname AS LAST_NAME,
4      h.city AS CITY,
5      h.country AS COUNTRY
6  FROM [HR].[Employees] AS h
7  WHERE h.city = 'Seattle' AND h.country = 'USA';
```