File   Edit   View   Query   Project   Tools   Window   Help

SQLQuery2.sql - LA...8CG1\varshith (54))*   LAPTOP-NHTU8CG1...- dbo.ecommerces   SQLQuery1.sql - LA...8CG1\varshith (59))

```sql
/****** Script for SelectTopNRows command fr
SELECT TOP (1000) [OrderID]
      ,[CustomerID]
      ,[ProductID]
      ,[OrderDate]
      ,[Quantity]
      ,[Price]
  FROM [DA].[dbo].[ecommerces]
```

219 %

	OrderID	CustomerID	ProductID	OrderDate	Quantity	Price
1	1	139	505	01-01-2024	5	500
2	2	152	506	02-01-2024	3	700
3	3	129	504	03-01-2024	4	300
4	4	115	504	04-01-2024	3	200
5	5	143	504	05-01-2024	1	1200
6	6	108	504	06-01-2024	1	900
7	7	121	504	07-01-2024	4	700
8	8	139	506	08-01-2024	4	200
9	9	158	506	09-01-2024	5	900
10	10	119	503	10-01-2024	5	200
11	11	123	502	11-01-2024	3	500
12	12	111	507	12-01-2024	4	200
13	13	111	504	13-01-2024	1	1200
14	14	124	501	14-01-2024	5	200
15	15	153	507	15-01-2024	5	200
16	16	136	506	16-01-2024	1	1200
17	17	140	501	17-01-2024	5	700
18	18	124	501	18-01-2024	3	200
19	19	103	501	19-01-2024	4	1200
20	20	122	501	20-01-2024	1	900

Query executed successfully.

SQLQuery2.sql - LA...8CG1\varshith (54))*   LAPTOP-NHTU8CG1...- dbo.ecommerces   SQLQuery1.sql - LA...8CG1\varshith (59))

```sql
(501,'Wireless Mouse','Electronics',750),
(502,'Bluetooth Keyboard','Electronics',1200),
(503,'Earbuds','Accessories',900),
(504,'Laptop Stand','Office',1500),
(505,'USB Cable','Accessories',250),
(506,'Power Bank','Electronics',1400),
(507,'Notebook','Stationery',80);


SELECT * FROM Products
```

219 %

	ProductID	ProductName	Category	UnitPrice
1	501	Wireless Mouse	Electronics	750
2	502	Bluetooth Keyboard	Electronics	1200
3	503	Earbuds	Accessories	900
4	504	Laptop Stand	Office	1500
5	505	USB Cable	Accessories	250
6	506	Power Bank	Electronics	1400
7	507	Notebook	Stationery	80

```sql
/*Sample SQL Questions + Solutions => SELECT + WHERE + ORDER BY */

SELECT OrderID, CustomerID, Quantity
FROM ecommerces
WHERE Quantity > 3
ORDER BY Quantity
```

200 %

Results | Messages

	OrderID	CustomerID	Quantity
1	3	129	4
2	7	121	4
3	8	139	4
4	12	111	4
5	19	103	4
6	21	153	4
7	53	109	4
8	55	118	4
9	57	125	4
10	67	147	4
11	70	108	4
12	74	117	4
13	75	136	4
14	76	150	4
15	48	103	4
16	51	107	4
17	78	104	4
18	85	129	4
19	90	110	4
20	97	114	4
21	80	106	4
22	82	142	4
23	112	129	4
24	118	109	4
25	121	144	4
26	123	124	4

```sql
/*2 GROUP BY + SUM + AVG*/
SELECT
    ProductID,
    SUM(CAST(Quantity AS INT)) AS TotalQuantity,
    SUM(CAST(Quantity AS INT) * CAST(Price AS INT)) AS TotalRevenue,
    AVG(CAST(Price AS INT)) AS AvgPrice
FROM ecommerces
GROUP BY ProductID;
```

200 %

Results | Messages

	ProductID	TotalQuantity	TotalRevenue	AvgPrice
1	501	124	79700	639
2	502	54	27700	473
3	503	93	64100	700
4	504	116	70700	638
5	505	56	32000	581
6	506	97	67900	723
7	507	70	38100	535

```sql
/*INNER JOIN*/
SELECT
    O.OrderID,
    O.CustomerID,
    O.ProductID,
    CAST(O.Quantity AS INT) AS Quantity,
    CAST(O.Price AS INT) AS Price,
    (CAST(O.Quantity AS INT) * CAST(O.Price AS INT)) AS TotalAmount
FROM ecommerces O
INNER JOIN Products P
    ON O.ProductID = P.ProductID;
```

200 %

Results | Messages

	OrderID	CustomerID	ProductID	Quantity	Price	TotalAmount
1	1	139	505	5	500	2500
2	2	152	506	3	700	2100
3	3	129	504	4	300	1200
4	4	115	504	3	200	600
5	5	143	504	1	1200	1200
6	6	108	504	1	900	900
7	7	121	504	4	700	2800
8	8	139	506	4	200	800
9	9	158	506	5	900	4500
10	10	119	503	5	200	1000
11	11	123	502	3	500	1500
12	12	111	507	4	200	800
13	13	111	504	1	1200	1200
14	14	124	501	5	200	1000
15	15	153	507	5	200	1000
16	16	136	506	1	1200	1200

Screenshot 1 — LEFT JOIN

```sql
/* LEFT JOIN => Show all orders, even if a ProductID is not found in Products.*/
SELECT
    O.OrderID,
    O.CustomerID,
    O.ProductID,
    P.ProductName,
    P.Category,
    CAST(O.Quantity AS INT) AS Quantity,
    CAST(O.Price AS INT) AS Price,
    (CAST(O.Quantity AS INT) * CAST(O.Price AS INT)) AS TotalAmount
FROM ecommerces O
LEFT JOIN Products P
    ON O.ProductID = P.ProductID;
```

Results

	OrderID	CustomerID	ProductID	Quantity	Price	TotalAmount
2	2	152	506	3	700	2100
3	3	129	504	4	300	1200
4	4	115	504	3	200	600
5	5	143	504	1	1200	1200
6	6	108	504	1	900	900
7	7	121	504	4	700	2800
8	8	139	506	4	200	800
9	9	158	506	5	900	4500
10	10	119	503	5	200	1000
11	11	123	502	3	500	1500
12	12	111	507	4	200	800
13	13	111	504	1	1200	1200
14	14	124	501	5	200	1000
15	15	153	507	5	200	1000
16	16	136	506	1	1200	1200
17	17	140	501	5	700	3500
18	18	124	501	3	200	600
19	19	103	501	4	1200	4800
20	20	122	503	1	900	900
21	21	153	506	4	500	2000
22	22	102	501	5	500	2500

Query executed successfully.   200 rows

Screenshot 2 — RIGHT JOIN

```sql
/* RIGHT JOIN => Show all products, even if they were never ordered.*/
SELECT
    O.OrderID,
    O.CustomerID,
    P.ProductID,
    P.ProductName,
    P.Category,
    CAST(O.Quantity AS INT) AS Quantity,
    CAST(O.Price AS INT) AS Price,
    (CAST(O.Quantity AS INT) * CAST(O.Price AS INT)) AS TotalAmount
FROM ecommerces O
RIGHT JOIN Products P
    ON O.ProductID = P.ProductID;
```

Results

	OrderID	CustomerID	ProductID	ProductName	Category	Quantity	Price	TotalAmount
1	14	124	501	Wireless Mouse	Electronics	5	200	1000
2	17	140	501	Wireless Mouse	Electronics	5	700	3500
3	18	124	501	Wireless Mouse	Electronics	3	200	600
4	19	103	501	Wireless Mouse	Electronics	4	1200	4800
5	22	102	501	Wireless Mouse	Electronics	5	500	2500
6	25	130	501	Wireless Mouse	Electronics	3	700	2100
7	30	112	501	Wireless Mouse	Electronics	3	200	600
8	33	144	501	Wireless Mouse	Electronics	3	700	2100
9	40	116	501	Wireless Mouse	Electronics	3	200	600
10	42	147	501	Wireless Mouse	Electronics	2	500	1000
11	44	144	501	Wireless Mouse	Electronics	3	700	2100
12	52	121	501	Wireless Mouse	Electronics	5	300	1500
13	54	139	501	Wireless Mouse	Electronics	1	500	500
14	55	118	501	Wireless Mouse	Electronics	4	900	3600
15	57	125	501	Wireless Mouse	Electronics	4	500	2000
16	64	102	501	Wireless Mouse	Electronics	2	200	400
17	65	120	501	Wireless Mouse	Electronics	2	900	1800
18	78	104	501	Wireless Mouse	Electronics	4	1200	4800
19	88	144	501	Wireless Mouse	Electronics	1	700	700
20	89	134	501	Wireless Mouse	Electronics	3	1200	3600
21	107	124	501	Wireless Mouse	Electronics	1	700	700

Query executed successfully.   200 rows

Object Explorer — first pane tree:
- LAPTOP-NHTU8CG1\SQLEXPRESS (SC
  - Databases
    - System Databases
    - Database Snapshots
    - DA
      - Database Diagrams
      - Tables
        - System Tables
        - FileTables
        - External Tables
        - Graph Tables
        - dbo.ecommerces
      - Views
      - External Resources
      - Synonyms
      - Programmability
      - Service Broker
      - Storage
      - Security
    - Data_analysis
    - iPhoneFactoryDB
    - MyDatabase
    - online_food
    - OrgAccenture
    - SalesDB
  - Security
  - Server Objects
  - Replication
  - PolyBase
  - Management
  - XEvent Profiler

```sql
        ON O.ProductID = P.ProductID;


    /* SUB QUERY */
  SELECT
        OrderID,
        CustomerID,
        ProductID,
        (SELECT Category
         FROM Products
         WHERE Products.ProductID = ecommerces.ProductID) AS Category
   FROM ecommerces;
```

150 %

Results | Messages

	OrderID	CustomerID	ProductID	Category
1	1	139	505	Accessories
2	2	152	506	Electronics
3	3	129	504	Office
4	4	115	504	Office
5	5	143	504	Office
6	6	108	504	Office
7	7	121	504	Office
8	8	139	506	Electronics
9	9	158	506	Electronics
10	10	119	503	Accessories
11	11	123	502	Electronics
12	12	111	507	Stationery
13	13	111	504	Office
14	14	124	501	Electronics
15	15	153	507	Stationery
16	16	136	506	Electronics
17	17	140	501	Electronics
18	18	124	501	Electronics
19	19	103	501	Electronics
20	20	122	503	Accessories
21	21	153	506	Electronics

Object Explorer — second pane tree:
- LAPTOP-NHTU8CG1\SQLEXPRESS (SC
  - Databases
    - System Databases
    - Database Snapshots
    - DA
      - Database Diagrams
      - Tables
        - System Tables
        - FileTables
        - External Tables
        - Graph Tables
        - dbo.ecommerces
      - Views
      - External Resources
      - Synonyms
      - Programmability
      - Service Broker
      - Storage
      - Security
    - Data_analysis
    - iPhoneFactoryDB
    - MyDatabase
    - online_food
    - OrgAccenture
    - SalesDB
  - Security
  - Server Objects
  - Replication
  - PolyBase
  - Management
  - XEvent Profiler

```sql
CREATE VIEW vw_ProductSalesSummary AS
 SELECT
      O.ProductID,
      P.ProductName,
      P.Category,
      SUM(CAST(O.Quantity AS INT)) AS TotalQuantitySold,
      SUM(CAST(O.Quantity AS INT) * CAST(O.Price AS INT)) AS TotalRevenue
 FROM ecommerces O
 INNER JOIN Products P ON O.ProductID = P.ProductID
 GROUP BY O.ProductID, P.ProductName, P.Category;


 SELECT * FROM vw_ProductSalesSummary;
```

150 %

Results | Messages

	ProductID	ProductName	Category	TotalQuantitySold	TotalRevenue
1	501	Wireless Mouse	Electronics	124	79700
2	502	Bluetooth Keyboard	Electronics	54	27700
3	503	Earbuds	Accessories	93	64100
4	504	Laptop Stand	Office	116	70700
5	505	USB Cable	Accessories	56	32000
6	506	Power Bank	Electronics	97	67900
7	507	Notebook	Stationery	70	38100

SQLQuery2.sql - LA...8CG1\varshith (54))* ⊕ ×   LAPTOP-NHTU8CG1...- dbo.ecommerces   SQLQuery1.sql - LA...8CG1\varshith (59))

```sql
/* Create views for analysis */

CREATE VIEW vw_OrderAnalysis AS
SELECT
    O.OrderID,
    O.OrderDate,
    O.CustomerID,
    O.ProductID,
    P.ProductName,
    P.Category,
    CAST(O.Quantity AS INT) AS Quantity,
    CAST(O.Price AS INT) AS Price,
    (CAST(O.Quantity AS INT) * CAST(O.Price AS INT)) AS TotalAmount
FROM ecommerces O
INNER JOIN Products P ON O.ProductID = P.ProductID;


SELECT * FROM vw_OrderAnalysis
```

100 % ▾ ◂

▦ Results 🗐 Messages

	OrderID	OrderDate	CustomerID	ProductID	ProductName	Category	Quantity	Price	TotalAmount
1	1	01-01-2024	139	505	USB Cable	Accessories	5	500	2500
2	2	02-01-2024	152	506	Power Bank	Electronics	3	700	2100
3	3	03-01-2024	129	504	Laptop Stand	Office	4	300	1200
4	4	04-01-2024	115	504	Laptop Stand	Office	3	200	600
5	5	05-01-2024	143	504	Laptop Stand	Office	1	1200	1200
6	6	06-01-2024	108	504	Laptop Stand	Office	1	900	900
7	7	07-01-2024	121	504	Laptop Stand	Office	4	700	2800
8	8	08-01-2024	139	506	Power Bank	Electronics	4	200	800
9	9	09-01-2024	158	506	Power Bank	Electronics	5	900	4500
10	10	10-01-2024	119	503	Earbuds	Accessories	5	200	1000
11	11	11-01-2024	123	502	Bluetooth Keyboard	Electronics	3	500	1500
12	12	12-01-2024	111	507	Notebook	Stationery	4	200	800
13	13	13-01-2024	111	504	Laptop Stand	Office	1	1200	1200
14	14	14-01-2024	124	501	Wireless Mouse	Electronics	5	200	1000
15	15	15-01-2024	153	507	Notebook	Stationery	5	200	1000
16	16	16-01-2024	136	506	Power Bank	Electronics	1	1200	1200
17	17	17-01-2024	140	501	Wireless Mouse	Electronics	5	700	3500
18	18	18-01-2024	124	501	Wireless Mouse	Electronics	3	200	600
19	19	19-01-2024	103	501	Wireless Mouse	Electronics	4	1200	4800
20	20	20-01-2024	122	503	Earbuds	Accessories	1	900	900
21	21	21-01-2024	153	506	Power Bank	Electronics	4	500	2000

⊘ Query executed successfully.   LAPTOP-NHTU8CG1\SQLEXPRESS ... LAPTOP-NHTU8CG1\varshi... DA 00:00:00 200 rows