

```
/*
```

What are AdventureWorks purchases (Purchase cost & quantity) by product?

```
*/
```

```
select
```

```
dp.ProductName,
```

```
p.OrderQty,
```

```
sum(fp.TotalDue) as 'Total Purchases'
```

```
from AdventureWorksDW_Part_3.dbo.FCT_Purchases fp inner join
```

```
AdventureWorksDW_Part_3.dbo.DIM_products_purchased dp
```

```
on fp.ProductPurchasedSK = dp.ProductPurchasedSK
```

```
group by dp.ProductName, fp.OrderQty
```

The screenshot displays the Microsoft SQL Server Management Studio interface. The query editor shows the following SQL query:

```
USE AdventureWorksDW_Part_3
/*
What are Adventureworks purchases (Purchase cost & quantity) by product?
*/
select dp.ProductName,
       fp.OrderQty,
       sum(fp.TotalDue) as 'Total Purchases'
from AdventureWorksDW_Part_3.dbo.FCT_Purchases fp inner join AdventureWorksDW_Part_3.dbo.DIM_products_purchased dp
on fp.ProductPurchasedSK = dp.ProductPurchasedSK
group by dp.ProductName, fp.OrderQty
```

The Results pane shows the output of the query, which is a table with three columns: ProductName, OrderQty, and Total Purchases. The table contains 24 rows of data, including products like Flat Washer 9, Hex Nut 4, HL Mountain Seat/Saddle, Chaining Bolts, Men's Bib-Shorts, S, Lock Nut 5, Lower Head Race, Thin-Jam Lock Nut 8, Hex Nut 21, Hex Nut 15, Men's Sports Shorts, XL, Lock Nut 15, LL Road Seat/Saddle, Racing Socks, L, Spokes, Short-Sleeve Classic Jersey, M, Thin-Jam Hex Nut 10, LL Road Rim, Metal Sheet 6, Headlights - Dual-Beam, Seat Post, Flat Washer 7, Guide Pulley, and Mountain Bike Socks, M.

ProductName	OrderQty	Total Purchases
Flat Washer 9	3	43636.00
Hex Nut 4	3	22464.00
HL Mountain Seat/Saddle	550	3105060.00
Chaining Bolts	3	210150.00
Men's Bib-Shorts, S	1050	609422.00
Lock Nut 5	3	28118.00
Lower Head Race	3	8058.00
Thin-Jam Lock Nut 8	3	20478.00
Hex Nut 21	3	23480.00
Hex Nut 15	3	22531.00
Men's Sports Shorts, XL	5000	609422.00
Lock Nut 15	3	38194.00
LL Road Seat/Saddle	550	3571540.00
Racing Socks, L	8000	41536.00
Spokes	550	209253.00
Short-Sleeve Classic Jersey, M	8000	1097448.00
Thin-Jam Hex Nut 10	3	17622.00
LL Road Rim	550	3531378.00
Metal Sheet 6	550	481444.00
Headlights - Dual-Beam	150	24071.00
Seat Post	550	498576.00
Flat Washer 7	3	26922.00
Guide Pulley	550	1712589.00
Mountain Bike Socks, M	150	1122.00

/*What types of products are purchased?*/

SELECT

dp.ProductName,

dp.ProductCategoryName,

dp.ProductSubcategoryName,

SUM(TotalDue) as 'Total Purchases'

from AdventureWorksDW_Part_3.dbo.FCT_Purchases fp inner join

AdventureWorksDW_Part_3.dbo.DIM_products_purchased dp

on fp.ProductPurchasedSK = dp.ProductPurchasedSK

group by dp.ProductName,

dp.ProductCategoryName,

dp.ProductSubcategoryName

The screenshot displays the Microsoft SQL Server Management Studio interface. The 'Object Explorer' on the left shows the database structure of AdventureWorksDW_Part_3. The 'SQL Query Editor' in the center contains the following query:

```
/*What types of products are purchased?*/  
SELECT  
    dp.ProductName,  
    dp.ProductCategoryName,  
    dp.ProductSubcategoryName,  
    SUM(TotalDue) as 'Total Purchases'  
from AdventureWorksDW_Part_3.dbo.FCT_Purchases fp inner join AdventureWorksDW_Part_3.dbo.DIM_products_purchased dp  
on fp.ProductPurchasedSK = dp.ProductPurchasedSK  
group by dp.ProductName,  
    dp.ProductCategoryName,  
    dp.ProductSubcategoryName
```

The 'Results' pane at the bottom shows the output of the query, which is a table with four columns: ProductName, ProductCategoryName, ProductSubcategoryName, and Total Purchases. The table contains 22 rows of data, including products like Adjustable Race, All-Purpose Bike Stand, and various bike components and accessories.

ProductName	ProductCategoryName	ProductSubcategoryName	Total Purchases
Adjustable Race	NULL	NULL	8572.00
All-Purpose Bike Stand	Accessories	Bike Stands	59942.00
AWC Logo Cap	Clothing	Caps	30199.00
Bearing Ball	NULL	NULL	6950.00
Bike Wash - Degreaser	Accessories	Cleaners	59942.00
Cable Lock	Accessories	Locks	24071.00
Chain	Components	Chains	52200.00
Chaining	NULL	NULL	249525.00
Chaining Bolts	NULL	NULL	210150.00
Chaining Hat	NULL	NULL	210150.00
Classic Vest, L	Clothing	Vests	872504.00
Classic Vest, M	Clothing	Vests	1309206.00
Classic Vest, S	Clothing	Vests	436402.00
Cone-Shaped Race	NULL	NULL	7350.00
Crown Race	NULL	NULL	8517.00
Cup-Shaped Race	NULL	NULL	8262.00
Decal 1	NULL	NULL	29000.00
Decal 2	NULL	NULL	29000.00
External Lock Washer 1	NULL	NULL	801361.00
External Lock Washer 2	NULL	NULL	18593.00
External Lock Washer 3	NULL	NULL	307805.00
External Lock Washer 4	NULL	NULL	307805.00

The status bar at the bottom indicates that the query was executed successfully, returning 265 rows in 00:00:00. The system tray shows the date and time as 11:25 PM on 3/31/2021.

/* What are AdventureWorks product purchases (Purchase cost & quantity) by vendor?*/

```
USE AdventureWorksDW_Part_3;
SELECT
V.VendorName 'Vendor Name',
prod.ProductName 'Product',
SUM(TotalDue) 'Total Purchase'
FROM DIM_vendors AS V join FCT_Purchases p ON V.BusinessEntityID = p.VendorID
JOIN DIM_productvendor dp on v.BusinessEntityID = dp.VendorID
JOIN DIM_product prod on dp.ProductID = prod.ProductID
GROUP BY V.VendorName, prod.ProductName ;
```

The screenshot displays the Microsoft SQL Server Management Studio interface. The query editor shows the following SQL query:

```
/*
What are Adventureworks product purchases (Purchase cost & quantity) by vendor?
*/
USE AdventureWorksDW_Part_3;
SELECT
V.VendorName 'Vendor Name',
prod.ProductName 'Product',
SUM(TotalDue) 'Total Purchase'
FROM DIM_vendors AS V join FCT_Purchases p ON V.BusinessEntityID = p.VendorID
JOIN DIM_productvendor dp on v.BusinessEntityID = dp.VendorID
JOIN DIM_product prod on dp.ProductID = prod.ProductID
GROUP BY V.VendorName, prod.ProductName ;
```

The Results pane shows the following data:

Vendor Name	Product	Total Purchase
Aurora Bike Center	Internal Lock Washer 6	180752.00
Nonstan Bike Hut	Hex Nut 6	213992.00
Advanced Bicycles	Thin-Jam Hex Nut 11	170751.00
Cruger Bike Company	Hex Nut 22	215089.00
Cruger Bike Company	Hex Nut 12	215089.00
Reliance Fitness, Inc.	Flat Washer 2	118471.00
Speed Corporation	Flat Washer 8	118300.00
Mountain Works	Lock Nut 17	522951.00
Australia Bike Retailer	Thin-Jam Lock Nut 13	110707.00
Reliance Fitness, Inc.	Flat Washer 9	118471.00
Speed Corporation	Flat Washer 1	118300.00
Aurora Bike Center	External Lock Washer 6	180752.00
International Bicycles	LL Road Rim	3178320.00
Integrated Sport Products	Short-Sleeve Classic Jersey, M	4611421.00
Nonstan Bike Hut	Hex Nut 14	213992.00
Pro Sport Industries	External Lock Washer 8	140973.00
Signature Cycles	ML Road Tire	4472100.00
Team Athletic Co.	Classic Vest, M	6546030.00
Tokes, Inc.	HL Mountain Tire	2923300.00
WestAmerica Bicycle Co.	Thin-Jam Hex Nut 11	128215.00

The status bar at the bottom indicates: "Query executed successfully. DESKTOP-STH5F4 (15.0 RTM) info7370 (56) AdventureWorksDW_Part_3 00:00:00 460 rows".

/*

What AdventureWorks' employees were involved in the above purchasing and what did they purchase

*/

SELECT

(E.FirstName+' '+E.LastName) 'Employee Name',

DPP.ProductName 'PRODUCTS',

P.OrderQty 'QUANTITY',

SUM(P.TotalDue) 'Total Purchase'

FROM DIM_employee E JOIN FCT_Purchases P

ON E.BusinessEntityID = P.EmployeeID

JOIN DIM_products_purchased DPP ON P.ProductPurchasedSK =

DPP.ProductPurchasedSK

GROUP BY

(E.FirstName+' '+E.LastName),

DPP.ProductName, P.OrderQty

order BY SUM(P.TotalDue) DESC

The screenshot displays the Microsoft SQL Server Management Studio interface. The query editor on the right contains the following SQL query:

```
/*
What AdventureWorks' employees were involved in the above purchasing and what did they purchase
*/
SELECT
(E.FirstName+' '+E.LastName) 'Employee Name',
DPP.ProductName 'PRODUCTS',
P.OrderQty 'QUANTITY',
SUM(P.TotalDue) 'Total Purchase'
FROM DIM_employee E JOIN FCT_Purchases P
ON E.BusinessEntityID = P.EmployeeID
JOIN DIM_products_purchased DPP ON P.ProductPurchasedSK =
DPP.ProductPurchasedSK
GROUP BY
(E.FirstName+' '+E.LastName),
DPP.ProductName, P.OrderQty
order BY SUM(P.TotalDue) DESC
```

The Results pane at the bottom shows the output of the query, which is a table with four columns: Employee Name, PRODUCTS, QUANTITY, and Total Purchase. The table contains 17 rows of data, sorted by Total Purchase in descending order.

Employee Name	PRODUCTS	QUANTITY	Total Purchase
Erin Hagers	Classic Vest, M	1250	1309206.00
Fukiko Ogiso	Short-Sleeve Classic Jersey, L	6000	1097448.00
Fukiko Ogiso	Short-Sleeve Classic Jersey, M	6000	1097448.00
Fukiko Ogiso	Short-Sleeve Classic Jersey, S	6000	1097448.00
Fukiko Ogiso	Short-Sleeve Classic Jersey, XL	6000	1097448.00
Erin Hagers	Classic Vest, L	1250	872804.00
Eric Kurjan	HL Touring SeatSaddle	550	848242.00
Eric Kurjan	HL Touring SeatSaddle	550	848242.00
Eric Kurjan	LL Touring SeatSaddle	550	848242.00
Mikael Sandberg	HL Road SeatSaddle	550	843014.00
Linda Meisner	HL Crankarm	550	812510.00
Mikael Sandberg	LL Mountain SeatSaddle	550	796813.00
Mikael Sandberg	HL Mountain SeatSaddle	550	796813.00
Linda Meisner	Touring Tire	550	761395.00
Linda Meisner	HL Road Tire	550	761395.00
Mikael Sandberg	ML Road SeatSaddle	550	718609.00
Eric Kurjan	HL Crankarm	550	707530.00

The status bar at the bottom indicates that the query was executed successfully, returning 2,040 rows.

/*

What vendors' contacts were involved in the above purchasing and what did they purchase

*/

SELECT

(vc.FirstName+' '+vc.LastName) 'Vendor Name',

DPP.ProductName 'PRODUCTS',

vc.ContactType 'Contact Type',

P.OrderQty 'QUANTITY',

SUM(P.TotalDue) 'Total Purchase'

FROM DIM_vendorcontacts vc JOIN FCT_Purchases P

ON vc.Vendor_BusinessEntityID = P.VendorID

JOIN DIM_products_purchased DPP ON P.ProductPurchasedSK =

DPP.ProductPurchasedSK

GROUP BY

(vc.FirstName+' '+vc.LastName),

DPP.ProductName, P.OrderQty, vc.ContactType

order BY SUM(P.TotalDue) DESC

The screenshot displays the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
/*
What vendors' contacts were involved in the above purchasing and what did they purchase
*/
SELECT
(vc.FirstName+' '+vc.LastName) 'Vendor Name',
DPP.ProductName 'PRODUCTS',
vc.ContactType 'Contact Type',
P.OrderQty 'QUANTITY',
SUM(P.TotalDue) 'Total Purchase'
FROM DIM_vendorcontacts vc JOIN FCT_Purchases P
ON vc.Vendor_BusinessEntityID = P.VendorID
JOIN DIM_products_purchased DPP ON P.ProductPurchasedSK =
DPP.ProductPurchasedSK
GROUP BY
(vc.FirstName+' '+vc.LastName),
DPP.ProductName, P.OrderQty, vc.ContactType
order BY SUM(P.TotalDue) DESC
```

The Results pane shows the following data:

Vendor Name	PRODUCTS	Contact Type	QUANTITY	Total Purchase
1 Stu Osborn	Front Brakes	Sales Associate	550	5034280.00
2 Stu Osborn	Rear Brakes	Sales Associate	550	5034280.00
3 Albert Rhodes	LL Road Tire	Sales Associate	550	2814794.00
4 Albert Rhodes	ML Road Tire	Sales Associate	550	2814794.00
5 Albert Rhodes	HL Road Tire	Sales Associate	550	2810439.00
6 Adam Reynolds	LL Road Pedal	Sales Agent	550	2578803.00
7 Adam Reynolds	ML Road Pedal	Sales Agent	550	2578803.00
8 Albert Rhodes	Touring Tire	Sales Associate	550	2565909.00
9 Scott Oveson	LL Crankarm	Sales Associate	550	2482420.00
10 Scott Oveson	ML Crankarm	Sales Associate	550	2482420.00
11 Anand Rao	LL Mountain Pedal	Sales Manager	550	2472786.00
12 Anand Rao	ML Mountain Pedal	Sales Manager	550	2472786.00
13 Barbara Moreland	LL Mountain Pedal	Sales Manager	550	2472786.00
14 Barbara Moreland	ML Mountain Pedal	Sales Manager	550	2472786.00

The status bar at the bottom indicates: "Query executed successfully. DESKTOP-STIH5F4 (15.0 RTM) info:7370 (56) AdventureWorksDW_Part3 00:00:00 758 rows".