

-- 1

```
SELECT DISTINCT CustomerName, Gender, SalesPersonName, City
FROM dim_customer C
INNER JOIN fact_productsales P
ON C.CustomerID = P.CustomerID
INNER JOIN dim_salesperson S
ON S.SalesPersonID = P.SalesPersonID
INNER JOIN dim_date D
ON P.SalesDateKey = D.DateKey
INNER JOIN dim_product L
ON L.ProductKey = P.ProductID
WHERE D.MONTH = 9
AND D.YEAR = '2015'
AND L.ProductSalesPrice > 20
AND P.Quantity > 8;
```

CustomerName	Gender	SalesPersonName	City
Linda Ronstadt	F	Tom Petty	Boulder
Elon Musk	M	Jacob Leis	Lafayette

-- 2

```
SELECT StoreName, City, ProductName
FROM dim_store S
INNER JOIN fact_productsales P
ON S.StoreID = P.StoreID
INNER JOIN dim_product L
ON L.ProductKey = P.ProductID
INNER JOIN dim_date D
ON P.SalesDateKey = D.DateKey
WHERE D.MONTH = 3
AND D.YEAR = '2017'
AND L.ProductActualCost < 50
AND S.City = 'Boulder';
```

StoreName	City	ProductName
ValueMart Boulder	Boulder	Wheat Flour 1kg
ValueMart Boulder	Boulder	Jasmine Rice 5kg
ValueMart Boulder	Boulder	SunFlower Oil 1 ltr

-- 3

```
SELECT SalesPersonName
FROM dim_salesperson S
LEFT JOIN fact_productsales P
ON P.SalesPersonID = S.SalesPersonID
LEFT JOIN dim_date D
ON P.SalesDateKey = D.DateKey
WHERE D.YEAR = '2017'
GROUP BY S.SalesPersonID
ORDER BY (SUM(SalesPrice * Quantity)) DESC
LIMIT 2;
```

SalesPersonName
Julian Brand
Jasmin Farah

-- 4

```
SELECT CustomerName, SUM(SalesPrice * Quantity) AS TotalRevenue
FROM dim_customer C
LEFT JOIN fact_productsales F
ON F.CustomerID = C.CustomerID
INNER JOIN dim_date D
ON D.datekey = F.SalesDateKey
WHERE D.YEAR = '2017'
GROUP BY C.CustomerID
ORDER BY TotalRevenue ASC
LIMIT 1;
```

CustomerName	TotalRevenue
Melinda Gates	437.50

-- 5

```
SELECT StoreName, SUM(SalesPrice) AS TotalSalesPrice
FROM dim_store S
RIGHT JOIN fact_productsales F
ON F.StoreID = S.StoreID
INNER JOIN dim_date D
ON D.DateKey = F.SalesDateKey
WHERE D.DATE BETWEEN '2010-01-01' AND '2017-12-31'
GROUP BY S.StoreName
ORDER BY StoreName ASC;
```

StoreName	TotalSalesPrice
ValueMart Berthoud	1554.00
ValueMart Boulder	7961.00
ValueMart Lyons	1759.50

-- 6

```
SELECT StoreName, ProductName, SUM((SalesPrice * Quantity)-(ProductCost * Quantity)) AS TotalProfit
FROM fact_productsales F
LEFT JOIN dim_store S
ON S.StoreID = F.StoreID
LEFT JOIN dim_product P
ON P.ProductKey = F.ProductID
INNER JOIN dim_date D
ON D.DateKey = F.SalesDateKey
WHERE ProductName LIKE '%Jasmine Rice%'
AND D.YEAR = '2010'
GROUP BY F.StoreID;
```

StoreName	ProductName	TotalProfit
ValueMart Boulder	Jasmine Rice 5kg	50.00
ValueMart Lyons	Jasmine Rice 5kg	19.00
ValueMart Berthoud	Jasmine Rice 5kg	18.00

-- 7

```
SELECT QUARTER AS Quarter, SUM(SalesPrice * Quantity) AS TotalRevenue
FROM dim_date D
LEFT JOIN fact_productsales F
ON F.SalesDateKey = D.DateKey
LEFT JOIN dim_store S
ON S.StoreID = F.StoreID
WHERE S.StoreName = 'ValueMart Boulder'
AND D.YEAR = '2016'
GROUP BY QUARTER
ORDER BY QUARTER ASC;
```

Quarter	TotalRevenue
1	1622.50
2	1144.50
3	2259.50
4	1492.50

-- 8

```
SELECT CustomerName, SUM(SalesPrice) AS TotalSalesPrice
FROM dim_customer C
RIGHT JOIN fact_productsales F
ON C.CustomerID = F.CustomerID
WHERE CustomerName = 'Melinda Gates'
OR CustomerName = 'Harrison Ford'
GROUP BY F.CustomerID;
```

CustomerName	TotalSalesPrice
Harrison Ford	2234.00
Melinda Gates	1717.00

-- 9

```
SELECT StoreName, SalesPrice, Quantity
FROM dim_store S
RIGHT JOIN fact_productsales F
ON S.StoreID = F.StoreID
INNER JOIN dim_date D
ON F.SalesDateKey = D.DateKey
WHERE D.DATE = '2017-03-12';
```

StoreName	SalesPrice	Quantity
ValueMart Boulder	6.50	8
ValueMart Boulder	24.00	3
ValueMart Boulder	43.50	9

-- 10

```
SELECT SalesPersonName, SUM(SalesPrice*Quantity) AS TotalRevenue
FROM dim_salesperson S
RIGHT JOIN fact_productsales F
ON S.SalesPersonID = F.SalesPersonID
GROUP BY F.SalesPersonID
ORDER BY TotalRevenue DESC
LIMIT 1;
```

SalesPersonName	TotalRevenue
Julian Brand	21164.50

-- 11

```
SELECT ProductName
FROM dim_product P
RIGHT JOIN fact_productsales F
ON P.ProductKey = F.ProductID
GROUP BY F.ProductID
ORDER BY SUM((SalesPrice - ProductCost)*Quantity) DESC
LIMIT 3;
```

ProductName
SunFlower Oil 1 ltr
Jasmine Rice 5kg
Tide Laundry Detergent 1kg case

-- 12

```
SELECT D.YEAR AS Year, D.MonthName AS 'Month', SUM(SalesPrice*Quantity) AS TotalRevenue
FROM fact_productsales F
INNER JOIN dim_date D
ON F.SalesDateKey = F.SalesDateKey
WHERE D.DATE BETWEEN '2017-01-01' AND '2017-03-31'
GROUP BY D.MonthName;
```

Year	Month	TotalRevenue
2017	January	111234.00
2017	February	111234.00
2017	March	166851.00

-- 13

```
SELECT ProductName, ROUND(AVG(ProductCost), 2) AS AverageProductCost, ROUND(AVG(SalesPrice),
2) AS AverageSalesPrice
FROM dim_product P
RIGHT JOIN fact_productsales F
ON P.ProductKey = F.ProductID
INNER JOIN dim_date D
ON F.SalesDateKey = D.DateKey
WHERE D.YEAR = '2017'
GROUP BY F.ProductID;
```

ProductName	AverageProductCost	AverageSalesPrice
Wheat Flour 1kg	5.50	6.50
Jasmine Rice 5kg	22.50	24.00
SunFlower Oil 1 ltr	42.00	43.50
Dawn Dish Soap, case	18.00	20.00
Tide Laundry Detergent 1kg case	135.00	139.00

-- 14

```
SELECT CustomerName, ROUND(AVG(SalesPrice), 2) AS AverageSalesPrice, ROUND(AVG(Quantity), 2) AS
AverageQuantity
FROM dim_customer C
RIGHT JOIN fact_productsales F
ON C.CustomerID = F.CustomerID
WHERE C.CustomerName = 'Melinda Gates';
```

CustomerName	AverageSalesPrice	AverageQuantity
Melinda Gates	26.02	4.98

-- 15

```
SELECT StoreName, ROUND(MAX(SalesPrice), 2) AS MaximumSalesPrice, ROUND(MIN(SalesPrice), 2) AS  
MinimumSalesPrice  
FROM dim_store S  
RIGHT JOIN fact_productsales F  
ON S.StoreID = F.StoreID  
WHERE City = 'Boulder'  
GROUP BY F.StoreID;
```

StoreName	MaximumSalesPric	MinimumSalesPrice
ValueMart Boulder	139.00	6.50