

## Task 5

1.

```
3 --1. retrieve the top 10 customer who made the most purchases
4
5 --checking the tables
6 select * from SalesLT.Customer;
7 select * from SalesLT.SalesOrderDetail;
8 select * from SalesLT.SalesOrderHeader;
9
10 SELECT TOP 10 c.CustomerID, SUM(sod.OrderQty) AS TotalPurchases
11 FROM SalesLT.Customer c
12 JOIN SalesLT.SalesOrderHeader soh ON soh.CustomerID = c.CustomerID
13 JOIN SalesLT.SalesOrderDetail sod ON sod.SalesOrderID = soh.SalesOrderID
14 GROUP BY c.CustomerID
```

110 %

Results Messages

	CustomerID	TotalPurchases
1	29957	286
2	29796	271
3	29736	267
4	30050	197
5	29929	173
6	29546	167
7	29485	140
8	29932	81
9	29938	77
10	29922	76

2.

```

17
18 --2. retrieve total sales revenue for each product category
19
20 SELECT pc.Name, SUM(so.LineTotal) AS TotalSales
21 FROM SalesLT.ProductCategory pc
22 JOIN SalesLT.Product p ON p.ProductCategoryID = pc.ProductCategoryID
23 JOIN SalesLT.SalesOrderDetail so ON so.ProductID = p.ProductID
24 GROUP BY pc.Name
25 ORDER BY TotalSales DESC;
26
27
28

```

10 %

Results Messages

	Name	TotalSales
1	Touring Bikes	220655.375796
2	Road Bikes	183130.296808
3	Mountain Bikes	170825.886000
4	Mountain Frames	54949.602000
5	Road Frames	24346.584000
6	Touring Frames	19066.260000
7	Jerseys	7017.880276
8	Vests	4309.903750
9	Cranksets	3968.868000
10	Shorts	3299.804532
11	Pedals	2996.496000

Query executed successfully. LAPTOP-U9U11BT\SQLEXPRESS ...

3.

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30 --3. retrieve the top 5 best-selling products by sales revenue.
31
32 SELECT TOP 5 p.Name, SUM(so.LineTotal) AS Revenue
33 FROM SalesLT.Product p
34 JOIN SalesLT.SalesOrderDetail so ON so.ProductID = p.ProductID
35 GROUP BY p.Name
36 ORDER BY Revenue DESC;
37
38
39
40

```

10 %

Results Messages

	Name	Revenue
1	Touring-1000 Blue, 60	37191.492000
2	Mountain-200 Black, 42	37178.838000
3	Road-350-W Yellow, 48	36486.235500
4	Mountain-200 Black, 38	35801.844000
5	Touring-1000 Yellow, 60	23413.474656

4.

```
43
44 --4. retrieve the total number of sales orders placed by month
45
46
47 SELECT MONTH(soh.OrderDate) AS Month,
48         COUNT(soh.SalesOrderID) AS Count
49 FROM SalesLT.SalesOrderHeader AS soh
50 GROUP BY MONTH(soh.OrderDate);
51
52
53
```

10 %

Results Messages

	Month	Count
1	6	32

5.

```
54
55 --5. retrieve the number of unique products sold in each product category
56
57 SELECT COUNT(DISTINCT so.ProductID) AS UniqueSold, pc.Name
58 FROM SalesLT.SalesOrderDetail so
59 JOIN SalesLT.Product p ON p.ProductID = so.ProductID
60 JOIN SalesLT.ProductCategory pc ON pc.ProductCategoryID = p.ProductCategoryID
61 GROUP BY pc.Name
62 ORDER BY UniqueSold DESC;
63
64
```

110 %

Results Messages

	UniqueSold	Name
1	22	Touring Bikes
2	20	Mountain Bikes
3	18	Road Bikes
4	14	Mountain Frames
5	10	Touring Frames
6	8	Road Frames
7	6	Jerseys
8	6	Pedals
9	5	Handlebars
10	5	Saddles
11	3	Shorts

6.

```

65 --6. retrieve the average sales revenue per customer.
66
67 SELECT c.CompanyName, AVG(sod.LineTotal) AS Average_Revenue
68 FROM SalesLT.Customer c
69 JOIN SalesLT.SalesOrderHeader soh ON soh.CustomerID = c.CustomerID
70 JOIN SalesLT.SalesOrderDetail sod ON sod.SalesOrderID = soh.SalesOrderID
71 GROUP BY c.CompanyName
72 ORDER BY Average_Revenue DESC;
73
74
75
76

```

110 %

Results Messages

	CompanyName	Average_Revenue
1	Extreme Riding Supplies	2392.401300
2	Action Bicycle Specialists	2089.983170
3	Instruments and Parts Company	1901.739000
4	Bulk Discount Store	1765.719714
5	Metropolitan Bicycle Supply	1730.209044
6	Eastside Department Store	1527.520185
7	Riding Cycles	1415.727465
8	Paints and Solvents Company	1323.131250
9	Many Bikes Store	1197.884184
10	Trailblazing Sports	1100.597922
11	Nearby Cycle Shop	1031.827862

Query executed successfully. | LAPTOP-U9U11BTI\SQLEXPRESS ... | LAPTOP-U9U11BTI\Nandan...

7.

```

77 --7. retrieve the total number of customers by region.
78
79
80 SELECT a.CountryRegion, COUNT(c.CustomerID) AS 'No of Customer'
81 FROM SalesLT.Address AS a
82 JOIN SalesLT.CustomerAddress AS ca ON ca.AddressID = a.AddressID
83 JOIN SalesLT.Customer AS c ON c.CustomerID = ca.CustomerID
84 GROUP BY a.CountryRegion
85 ORDER BY COUNT(c.CustomerID) DESC;
86
87

```

110 %

Results Messages

	CountryRegion	No of Customer
1	United States	272
2	Canada	107
3	United Kingdom	38