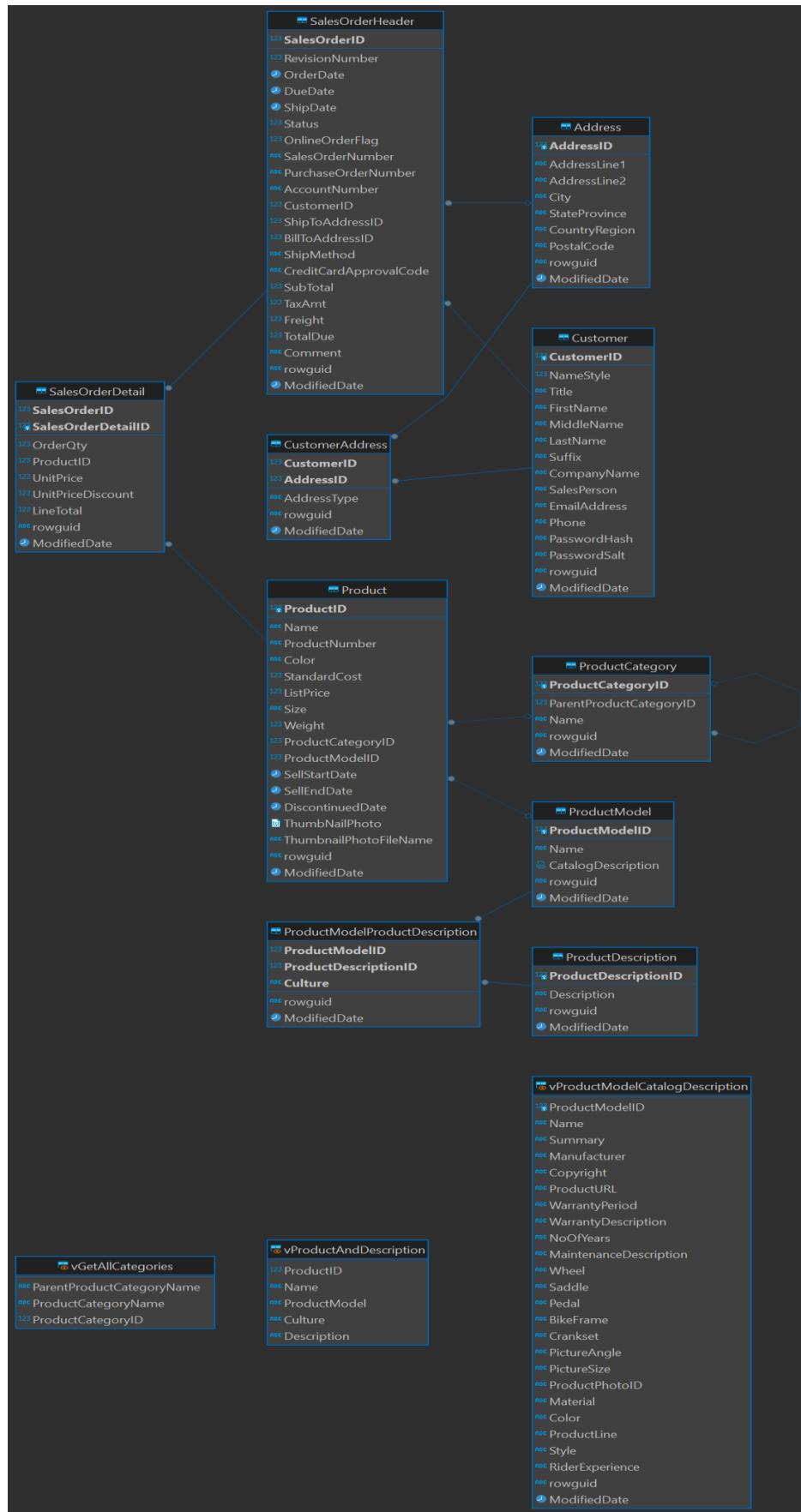


# AZURE Task

## T-SQL Queries on AdventureWorks LT Database

ER of DB:



## Queries:

## Basic to Intermediate:

1. Retrieve all columns from the 'Product' table.

The screenshot shows the DBeaver interface with the following details:

- Top Bar:** DBeaver 23.3.2 - <azuretraining> Script. Includes File, Edit, Navigate, Search, SQL Editor, Database, Window, Help.
- Left Sidebar:** Database Navigator and Projects. The Database Navigator shows the connection to AdventureWorks2022 and the current database azuretraining. Under azuretraining, it lists Databases (azuretraining), Schemas (dbo, SalesLT), and Tables (Address, Customer, CustomerAddress, Product, ProductCategory, ProductDescription, ProductModel, ProductModelProductDescription, SalesOrderDetail, SalesOrderHeader). External Tables and VIEWS are also listed.
- Central Area:**
  - Script Tab:** Displays the following SQL code:

```
<azuretraining> Script
SELECT * FROM SalesLT.Product p ;
/* Pranav Walia */
```
  - Results Tab:** Shows the results of the executed query. The results grid displays 200 rows of product data from the SalesLT.Product table. The columns are: ProductID, Name, ProductNumber, Color, StandardCost, ListPrice, Size, Weight, and ProductCat. The first few rows are:

ProductID	Name	ProductNumber	Color	StandardCost	ListPrice	Size	Weight	ProductCat
680	HL Road Frame - Black, 58	FR-R92B-58	Black	1059.3100	1431.5000	58	1,016.04	
706	HL Road Frame - Red, 58	FR-R92R-58	Red	1059.3100	1431.5000	58	1,016.04	
707	Sport-100 Helmet, Red	HL-U509-R	Red	13.0863	34.9900	[NULL]	[NULL]	
708	Sport-100 Helmet, Black	HL-U509	Black	13.0863	34.9900	[NULL]	[NULL]	
709	Mountain Bike Socks, M	SO-8909-M	White	3.3963	9.5000	M	[NULL]	
710	Mountain Bike Socks, L	SO-8909-L	White	3.3963	9.5000	L	[NULL]	
711	Sport-100 Helmet, Blue	HL-U509-B	Blue	13.0863	34.9900	[NULL]	[NULL]	
712	AWC Logo Cap	CA-1098	Multi	6.9223	8.9900	[NULL]	[NULL]	
713	Long-Sleeve Logo Jersey, S	U-0192-S	Multi	38.4923	49.9900	S	[NULL]	
714	Long-Sleeve Logo Jersey, M	U-0192-M	Multi	38.4923	49.9900	M	[NULL]	
715	Long-Sleeve Logo Jersey, L	U-0192-L	Multi	38.4923	49.9900	L	[NULL]	
716	Long-Sleeve Logo Jersey, XL	U-0192-X	Multi	38.4923	49.9900	XL	[NULL]	
717	HL Road Frame - Red, 62	FR-R92R-62	Red	868.6342	1431.5000	62	1,043.26	
740	HL Road Frame - Red, 44	FR-R92D-44	Red	868.6342	1431.5000	44	961.61	

2. Display unique product categories from the 'ProductCategory' table.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of object name here

> AdventureWorks2022 - dbserverincedo.database.windows.net

azuretraining - dbserverincedo.database.windows.net

Databases

azuretraining

Schemas

dbo

SalesLT

Tables

- Address
- Customer
- CustomerAddress
- Product
- ProductCategory
- ProductDescription
- ProductModel
- ProductModelProductDescription
- SalesOrderDetail
- SalesOrderHeader

External Tables

VIEWS

Project - General

Name Data Source

Bookmarks

Diagrams

Scripts

Auto.azuretraining.dbo@azuretraining

Script

```
SELECT DISTINCT Name FROM SalesLT.ProductCategory pc;
```

/\* Pranav Walia \*/

Results 1

Record	Name
1	Accessories
2	Bib-Shorts
3	Bike Racks
4	Bike Stands
5	Bikes
6	Bottles and Cages
7	Bottom Brackets
8	Brakes
9	Caps
10	Chains
11	Cleaners
12	Clothing
13	Components
14	Cranksets
15	Derailleurs
16	End caps

Refresh Save Cancel Export data 200 41 41 row(s) fetched - 0.604s, on 2024-02-04 at 14:00:56

IST en Writable Smart Insert 1:54:53 Set 0|0

3. List all products with their names and standard costs.

DBeaver 23.3.2 - <azurートaining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto azuretraining dbo@azurートaining

Database Navigator Projects

Enter a part of object name here

Schemas: dbo, SalesLT

Tables: Address, Customer, CustomerAddress, Product, ProductCategory, ProductDescription, ProductModel, ProductModelProductDescription, SalesOrderDetail, SalesOrderHeader

External Tables, Views, Indexes, Procedures, Sequences, Synonyms

Project - General

Name: Data Source

Bookmarks, Diagrams, Scripts

Results 1

	Name	StandardCost
1	HL Road Frame - Black, 58	1059.3100
2	HL Road Frame - Red, 58	1059.3100
3	Sport-100 Helmet, Red	13.0863
4	Sport-100 Helmet, Black	13.0863
5	Mountain Bike Socks, M	3.3963
6	Mountain Bike Socks, L	3.3963
7	Sport-100 Helmet, Blue	13.0863
8	AWC Logo Cap	6.9223
9	Long-Sleeve Logo Jersey, S	38.4923
10	Long-Sleeve Logo Jersey, M	38.4923
11	Long-Sleeve Logo Jersey, L	38.4923
12	Long-Sleeve Logo Jersey, XL	38.4923
13	HL Road Frame - Red, 62	868.6342
14	HL Road Frame - Red, 44	868.6342
15	HL Road Frame - Red, 48	868.6342
16	HL Road Frame - Red, 52	868.6342

200 row(s) fetched - 0.649s (0.003s fetch), on 2024-02-04 at 14:02:02

IST en

#### 4. Show the first 10 records from the 'Product' table.

DBeaver 23.3.2 - <azurートaining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto azuretraining dbo@azurートaining

Database Navigator Projects

Enter a part of object name here

Schemas: dbo, SalesLT

Tables: Address, Customer, CustomerAddress, Product, ProductCategory, ProductDescription, ProductModel, ProductModelProductDescription, SalesOrderDetail, SalesOrderHeader

External Tables, Views, Indexes, Procedures, Sequences, Synonyms

Project - General

Name: Data Source

Bookmarks, Diagrams, Scripts

Results 1

ProductID	Name	ProductNumber	Color	StandardCost	ListPrice	Size	Weight	ProductCategoryID
680	HL Road Frame - Black, 58	FR-R92B-58	Black	1059.3100	1431.5000	58	1.016.04	
706	HL Road Frame - Red, 58	FR-R92R-58	Red	1059.3100	1431.5000	58	1.016.04	
707	Sport-100 Helmet, Red	HL-US09-R	Red	13.0863	34.9900	[NULL]	[NULL]	
708	Sport-100 Helmet, Black	HL-US09	Black	13.0863	34.9900	[NULL]	[NULL]	
709	Mountain Bike Socks, M	SO-B909-M	White	3.3963	9.5000	M	[NULL]	
710	Mountain Bike Socks, L	SO-B909-L	White	3.3963	9.5000	L	[NULL]	
711	Sport-100 Helmet, Blue	HL-US09-B	Blue	13.0863	34.9900	[NULL]	[NULL]	
712	AWC Logo Cap	CA-1098	Multi	6.9223	8.9900	[NULL]	[NULL]	
713	Long-Sleeve Logo Jersey, S	UJ-0192-S	Multi	38.4923	49.9900	S	[NULL]	
714	Long-Sleeve Logo Jersey, M	UJ-0192-M	Multi	38.4923	49.9900	M	[NULL]	

10 row(s) fetched - 0.321s, on 2024-02-04 at 14:03:00

IST Writable Smart Insert 1 : 41 : 40 Sel: 0 | 0

#### 5. Find the total number of records in the 'SalesOrderHeader' table.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
```

Database Navigator Projects

Enter a part of object name here

Schemas  
dbo  
SalesLT  
Tables  
Address  
Customer  
CustomerAddress  
Product  
ProductCategory  
ProductDescription  
ProductModel  
ProductModelProductDescription  
SalesOrderDetail  
SalesOrderHeader  
External Tables  
Views  
Indexes  
Procedures  
Sequences  
Synonyms

\*<azuretraining> Script

```
SELECT COUNT(*) From SalesLT.SalesOrderHeader soh ;
```

/\* Pranav Walia \*/

Results 1

	Count
1	32

Grid Text Record

Refresh Save Cancel Export data 200 1 1 row(s) fetched - 0.954s, on 2024-02-04 at 14:03:40

IST en Writable Smart Insert 1:52:51 Sel: 0 | 0

**6. Retrieve the product name and quantity from the 'SalesOrderDetail' table.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
```

Database Navigator Projects

Enter a part of object name here

Schemas  
dbo  
SalesLT  
Tables  
Address  
Customer  
CustomerAddress  
Product  
ProductCategory  
ProductDescription  
ProductModel  
ProductModelProductDescription  
SalesOrderDetail  
SalesOrderHeader  
External Tables  
Views  
Indexes  
Procedures  
Sequences  
Synonyms

\*<azuretraining> Script

```
SELECT ProductID, OrderQty FROM SalesLT.SalesOrderDetail sod ;
```

/\* Pranav Walia \*/

Results 1

ProductID	OrderQty
1	836
2	822
3	907
4	905
5	983
6	988
7	748
8	990
9	926
10	743
11	782
12	918
13	780
14	937
15	867
...	...

Grid Text Record

Refresh Save Cancel Export data 200+ 200+ 200 row(s) fetched - 0.884s (0.001s fetch), on 2024-02-04 at 14:05:07

IST en Writable Smart Insert 3:19:85 Sel: 0 | 0

**7. Display the distinct values of the 'CountryRegion' column from the 'Address' table.**

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto Commit Rollback azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Schemas: dbo, SalesLT

Tables: Address

Columns: AddressID, AddressLine1, AddressLine2, City, StateProvince, CountryRegion, PostalCode, rowguid, ModifiedDate

Unique Keys, Check constraints, Foreign Keys, Indexes, References

Project - General

Name: DataSource

Bookmarks, Diagrams, Scripts

\*<azuretraining> Script

```
SELECT DISTINCT CountryRegion from SalesLT.Address a ;
/* Pranav Walia */
```

Results 1

CountryRegion
Canada
United Kingdom
United States

Grid Text Record

Refresh Save Cancel Export data 200 3 3 row(s) fetched - 0.311s, on 2024-02-04 at 14:06:27

IST en Writable Smart Insert 3:19:76 Sel: 0|0

## 8. List the top 5 customers with the highest total sales amount.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto Commit Rollback azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Schemas: dbo, SalesLT

Tables: Address, Customer, CustomerAddress, Product, ProductCategory, ProductDescription, ProductModel, ProductModelProductDescription, SalesOrderDetail, SalesOrderHeader

External Tables, Views, Indexes, Procedures, Sequences, Synonyms

Project - General

Name: DataSource

Bookmarks, Diagrams, Scripts

\*<azuretraining> Script

```
SELECT TOP 5 c.CustomerID, c.FirstName, c.LastName, SUM(soh.TotalDue) AS TotalSalesAmount
FROM [SalesLT].[Customer] c
JOIN [SalesLT].[SalesOrderHeader] soh ON c.CustomerID = soh.CustomerID
GROUP BY c.CustomerID, c.FirstName, c.LastName
ORDER BY TotalSalesAmount DESC;
```

/\* Pranav Walia \*/

Results 1

CustomerID	FirstName	LastName	TotalSalesAmount
29.736	Terry	Eminizer	119960.8240
30.050	Krishna	Sunkammurali	108597.9536
29.546	Christopher	Beck	98138.2131
29.957	Kevin	Liu	92663.5609
29.796	Jon	Grande	86222.8072

Grid Text Record

Refresh Save Cancel Export data 200 5 5 row(s) fetched - 0.282s, on 2024-02-04 at 14:09:05

IST en Writable Smart Insert 6:1:273 Sel: 0|0

## 9. Find the average order quantity from the 'SalesOrderDetail' table.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of object name here

Schemas  
dbo  
SalesLT  
Tables  
Address  
Customer  
CustomerAddress  
Product  
ProductCategory  
ProductDescription  
ProductModel  
ProductModelProductDescription  
SalesOrderDetail  
SalesOrderHeader  
External Tables  
Views  
Indexes  
Procedures  
Sequences  
Synonyms

Project - General

Name: DataSource

Bookmarks  
Diagrams  
Scripts

\*<azuretraining> Script

```
SELECT AVG(OrderQty) FROM [SalesLT].[SalesOrderDetail];
```

/\* Pranav Walia \*/

Results 1

1	3

Grid Text Record

Refresh Save Cancel Export data 200 1 1 row(s) fetched - 0.608s, on 2024-02-04 at 14:09:57

IST en Writable Smart Insert 1:56:55 Sel: 0|0

**10. Show the product names and list prices for products with a list price greater than 500.**

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of object name here

Schemas  
dbo  
SalesLT  
Tables  
Address  
Customer  
CustomerAddress  
Product  
ProductCategory  
ProductDescription  
ProductModel  
ProductModelProductDescription  
SalesOrderDetail  
SalesOrderHeader  
External Tables  
Views  
Indexes  
Procedures  
Sequences  
Synonyms

Project - General

Name: DataSource

Bookmarks  
Diagrams  
Scripts

\*<azuretraining> Script

```
SELECT Name, ListPrice FROM [SalesLT].[Product] WHERE ListPrice > 500;
```

/\* Pranav Walia \*/

Results 1

Name	ListPrice
HL Road Frame - Black, 58	1431.5000
HL Road Frame - Red, 58	1431.5000
HL Road Frame - Red, 62	1431.5000
HL Road Frame - Red, 44	1431.5000
HL Road Frame - Red, 48	1431.5000
HL Road Frame - Red, 52	1431.5000
HL Road Frame - Red, 56	1431.5000
ML Road Frame - Red, 44	594.8300
ML Road Frame - Red, 48	594.8300
ML Road Frame - Red, 52	594.8300
ML Road Frame - Red, 58	594.8300
ML Road Frame - Red, 60	594.8300
HL Mountain Frame - Silver, 42	1364.5000
HL Mountain Frame - Silver, 44	1364.5000
HL Mountain Frame - Silver, 48	1364.5000
HL Mountain Frame - Silver, 46	1364.5000

Grid Text Record

Refresh Save Cancel Export data 200 136 136 row(s) fetched - 0.631s, on 2024-02-04 at 14:10:13

IST en Writable Smart Insert 1:70:69 Sel: 0|0

**11. Count the number of products in each product category.**

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Product

- Columns
- Name (Name)
- ProductNumber (nvarchar(15))
- Color (nvarchar(15))
- StandardCost (money)
- ListPrice (money)
- Size (nvarchar(5))
- Weight (decimal(8,2))
- ProductCategoryID (int)
- ProductModelID (int)
- SellStartDate (datetime)
- SellEndDate (datetime)
- DiscontinuedDate (datetime)
- ThumbnailPhoto (varbinary)
- ThumbnailPhotoFileName
- rowguid (uniqueidentifier)
- ModifiedDate (datetime)

Project - General

Name

Bookmarks

Diagrams

Scripts

\*<azuretraining> Script

```
•SELECT ProductCategoryID, COUNT(*) AS ProductCount
FROM [SalesLT].[Product]
GROUP BY ProductCategoryID;
```

/\* Pranav Walia \*/

Results 1

ProductCategoryID	ProductCount
1	5
2	6
3	7
4	8
5	9
6	10
7	11
8	12
9	13
10	14
11	15
12	16
13	17
14	18
15	19
16	20
17	21
18	22
19	23
20	24
21	25
22	26
23	27
24	28
25	29
26	30
27	31
28	32
29	33
30	34
31	35
32	36
33	37
34	38
35	39
36	40
37	41
38	42
39	43
40	44
41	45
42	46
43	47
44	48
45	49
46	50
47	51
48	52
49	53
50	54
51	55
52	56
53	57
54	58
55	59
56	60
57	61
58	62
59	63
60	64
61	65
62	66
63	67
64	68
65	69
66	70
67	71
68	72
69	73
70	74
71	75
72	76
73	77
74	78
75	79
76	80
77	81
78	82
79	83
80	84
81	85
82	86
83	87
84	88
85	89
86	90
87	91
88	92
89	93
90	94
91	95
92	96
93	97
94	98
95	99
96	100

Refresh Save Cancel Export data 200 37 37 row(s) fetched - 0.685s, on 2024-02-04 at 14:13:07 IST en Writable Smart Insert 1:34:33 Sel: 0|0

## 12. Retrieve the latest 5 orders from the 'SalesOrderHeader' table.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

azuretraining - dserverincedo.database.windows.net

azuretraining

- Schemas
- dbo
- SalesLT
- Tables
- Address
- Customer
- CustomerAddress
- Product
- ProductCategory
- ProductDescription
- ProductModel
- ProductModelProductDescription
- SalesOrderDetail
- SalesOrderHeader
- External Tables
- Views
- Indexes

Project - General

Name

Bookmarks

Diagrams

Scripts

\*<azuretraining> Script

```
•SELECT TOP 5 * FROM [SalesLT].[SalesOrderHeader] ORDER BY OrderDate DESC;
```

/\* Pranav Walia \*/

Results 1

SalesOrderID	RevisionNumber	OrderDate	DueDate	ShipDate	Status	OnlineOrderFlag
71,784	2	2008-06-01 00:00:00.000	2008-06-13 00:00:00.000	2008-06-08 00:00:00.000	5	0 SO7
71,783	2	2008-06-01 00:00:00.000	2008-06-13 00:00:00.000	2008-06-08 00:00:00.000	5	0 SO7
71,782	2	2008-06-01 00:00:00.000	2008-06-13 00:00:00.000	2008-06-08 00:00:00.000	5	0 SO7
71,780	2	2008-06-01 00:00:00.000	2008-06-13 00:00:00.000	2008-06-08 00:00:00.000	5	0 SO7
71,776	2	2008-06-01 00:00:00.000	2008-06-13 00:00:00.000	2008-06-08 00:00:00.000	5	0 SO7

Refresh Save Cancel Export data 200 5 5 row(s) fetched - 0.324s, on 2024-02-04 at 14:14:20 IST en Writable Smart Insert 1:74:73 Sel: 0|0

## 13. List the product names and their respective categories.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
azuretraining - dserverincedo.database.windows.net
Databases
azuretraining
Schemas
dbo
Tables
Address
Customer
CustomerAddress
Product
ProductCategory
ProductDescription
ProductModel
ProductModelProductDescription
SalesOrderDetail
SalesOrderHeader
External Tables
Views
Indexes
Project - General
Name
Bookmarks
Diagrams
Scripts
```

\*<azuretraining> Script

```
•SELECT p.Name, pc.Name AS Category
FROM [SalesLT].[Product] p
JOIN [SalesLT].[ProductCategory] pc ON p.ProductCategoryID = pc.ProductCategoryID;
/* Pranav Walia */
```

Results 1 ×

	Name	Category
1	HL Road Frame - Black, 58	Road Frames
2	HL Road Frame - Red, 58	Road Frames
3	Sport-100 Helmet, Red	Helmets
4	Sport-100 Helmet, Black	Helmets
5	Mountain Bike Socks, M	Socks
6	Mountain Bike Socks, L	Socks
7	Sport-100 Helmet, Blue	Helmets
8	AWC Logo Cap	Caps
9	Long-Sleeve Logo Jersey, S	Jerseys
10	Long-Sleeve Logo Jersey, M	Jerseys
11	Long-Sleeve Logo Jersey, L	Jerseys
12	Long-Sleeve Logo Jersey, XL	Jerseys
13	HL Road Frame - Red, 62	Road Frames
14	HL Road Frame - Red, 44	Road Frames
15	HL Road Frame - Red, 48	Road Frames
16	HL Road Frame - Red, 52	Road Frames

Grid Text Record Refresh Save Cancel Export data 200 200+ IST en Writable Smart Insert 1:41:148 Sel: 0|0

#### 14. Display the customer names and email addresses from the 'Customer' table.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
azuretraining - dserverincedo.database.windows.net
Databases
azuretraining
Schemas
dbo
Tables
Address
Customer
CustomerAddress
Product
ProductCategory
ProductDescription
ProductModel
ProductModelProductDescription
SalesOrderDetail
SalesOrderHeader
External Tables
Views
Indexes
Project - General
Name
Bookmarks
Diagrams
Scripts
```

\*<azuretraining> Script

```
•SELECT FirstName, LastName, EmailAddress FROM [SalesLT].[Customer];
/* Pranav Walia */
```

Results 1 ×

	FirstName	LastName	EmailAddress
1	Orlando	Gee	orlando0@adventure-works.com
2	Keith	Harris	keith0@adventure-works.com
3	Donna	Carreras	donna1@adventure-works.com
4	Janet	Gates	janet0@adventure-works.com
5	Lucy	Harrington	lucy0@adventure-works.com
6	Rosmarie	Carroll	rosmarie0@adventure-works.com
7	Dominic	Gash	dominic0@adventure-works.com
8	Kathleen	Garza	kathleen0@adventure-works.com
9	Katherine	Harding	katherine0@adventure-works.com
10	Johnny	Caprio	johnny0@adventure-works.com
11	Christopher	Beck	christopher1@adventure-works.com
12	David	Liu	david20@adventure-works.com
13	John	Beaver	john8@adventure-works.com
14	Jean	Handley	jean1@adventure-works.com
15	Jinghao	Liu	jinghao1@adventure-works.com
16	Linda	Burnett	linda4@adventure-works.com

Grid Text Record Refresh Save Cancel Export data 200 200+ IST en Writable Smart Insert 1:68:67 Sel: 0|0

#### 15. Find the total sales amount for each year.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
azuretraining - dbeaverincedo.database.windows.net
Databases
azuretraining
Schemas
dbo
Tables
Address
Customer
CustomerAddress
Product
ProductCategory
ProductDescription
ProductModel
ProductModelProductDescription
SalesOrderDetail
SalesOrderHeader
External Tables
Views
Indexes
Project - General
Name DataSource
Bookmarks
Diagrams
Scripts
```

\*<azuretraining> Script x

```
•SELECT YEAR(OrderDate) AS OrderYear, SUM(TotalDue) AS TotalSalesAmount
FROM [SalesLT].[SalesOrderHeader]
GROUP BY YEAR(OrderDate);
/*
* Pranav Walia */
...
```

Results 1 x

OrderYear	TotalSalesAmount
2,008	956303.5949

Grid Text Record

Refresh Save Cancel Export data 200 1 IST en Writable Smart Insert 4 : 1 : 134 Sel: 0 | 0

**16. Retrieve the contact information (FirstName, LastName, EmailAddress) of all customers who placed orders.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
SalesLT
Tables
Address
Customer
Columns
Unique Keys
Check constraints
Foreign Keys
Indexes
References
Triggers
Extended Properties
CustomerAddress
Product
ProductCategory
ProductDescription
ProductModel
ProductModelProductDescription
SalesOrderDetail
SalesOrderHeader
Project - General
Name DataSource
Bookmarks
Diagrams
Scripts
```

\*<azuretraining> Script x

```
•SELECT c.FirstName, c.LastName, c.EmailAddress
FROM [SalesLT].[Customer] c
JOIN [SalesLT].[SalesOrderHeader] soh ON c.CustomerID = soh.CustomerID;
/*
* Pranav Walia */
...
```

Results 1 x

FirstName	LastName	EmailAddress
Catherine	Abel	catherine@adventure-works.com
Cory	Booth	cory@adventure-works.com
Christopher	Beck	christopher1@adventure-works.com
Donald	Blanton	donald0@adventure-works.com
Walter	Brian	walter0@adventure-works.com
Richard	Byham	richard2@adventure-works.com
Rosmarie	Carroll	rosmarie0@adventure-works.com
Brigid	Cavendish	brigid0@adventure-works.com
Pei	Chow	pei0@adventure-works.com
Anthony	Chor	anthony0@adventure-works.com
Terry	Eminizer	terry1@adventure-works.com
Janeth	Esteves	janeth1@adventure-works.com
Guy	Gilbert	guy0@adventure-works.com
Jon	Grande	jon1@adventure-works.com
David	Hodgson	david16@adventure-works.com

Grid Text Record

Refresh Save Cancel Export data 200 32 IST en Writable Smart Insert 4 : 1 : 150 Sel: 0 | 0

**17. Retrieve the product names and their respective colors.**

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Product

- Columns
  - ProductID (int)
  - Name (Name)
  - ProductNumber (nvarchar(15))
  - Color (nvarchar(15))
  - StandardCost (money)
  - ListPrice (money)
  - Size (nvarchar(5))
  - Weight (decimal(8,2))
  - ProductCategoryID (int)
  - ProductModelID (int)
  - SellStartDate (datetime)
  - SellEndDate (datetime)
  - DiscontinuedDate (datetime)
  - ThumbnailPhoto (varbinary)
  - ThumbnailPhotoFileName (nvarchar(255))
  - rowguid (uniqueidentifier)
  - ModifiedDate (datetime)
- Unique Keys

Project - General

Name | DataSource

Bookmarks Diagrams Scripts

\*<azuretraining> Script

```
•SELECT Name, Color
FROM [SalesLT].[Product]
WHERE Color IS NOT NULL;
```

/\* Pranav Walia \*/

Results 1

	Name	Color
1	HL Road Frame - Black, 58	Black
2	HL Road Frame - Red, 58	Red
3	Sport-100 Helmet, Red	Red
4	Sport-100 Helmet, Black	Black
5	Mountain Bike Socks, M	White
6	Mountain Bike Socks, L	White
7	Sport-100 Helmet, Blue	Blue
8	AWC Logo Cap	Multi
9	Long-Sleeve Logo Jersey, S	Multi
10	Long-Sleeve Logo Jersey, M	Multi
11	Long-Sleeve Logo Jersey, L	Multi
12	Long-Sleeve Logo Jersey, XL	Multi
13	HL Road Frame - Red, 62	Red
14	HL Road Frame - Red, 44	Red
15	HL Road Frame - Red, 48	Red
16	HL Road Frame - Red, 52	Red

200 row(s) fetched - 1s (0.285s fetch), on 2024-02-04 at 14:24:54

IST en Writable Smart Insert 4 : 1 : 72 Sel: 0 | 0

## 18. Show the average order quantity for each product.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Auto azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Product

- Columns
  - ProductID (int)
  - Name (Name)
  - ProductNumber (nvarchar(15))
  - Color (nvarchar(15))
  - StandardCost (money)
  - ListPrice (money)
  - Size (nvarchar(5))
  - Weight (decimal(8,2))
  - ProductCategoryID (int)
  - ProductModelID (int)
  - SellStartDate (datetime)
  - SellEndDate (datetime)
  - DiscontinuedDate (datetime)
  - ThumbnailPhoto (varbinary)
  - ThumbnailPhotoFileName (nvarchar(255))
  - rowguid (uniqueidentifier)
  - ModifiedDate (datetime)
- Unique Keys

Project - General

Name | DataSource

Bookmarks Diagrams Scripts

\*<azuretraining> Script

```
•SELECT ProductID, AVG(OrderQty) AS AvgOrderQuantity
FROM [SalesLT].[SalesOrderDetail]
GROUP BY ProductID;
```

/\* Pranav Walia \*/

Results 1

ProductID	AvgOrderQuantity
707	5
708	8
711	5
712	5
714	3
715	5
716	4
717	1
718	1
722	4
738	2
739	3
742	5
743	2
747	3

142 row(s) fetched - 0.883s, on 2024-02-04 at 14:26:35

IST en Writable Smart Insert 4 : 1 : 109 Sel: 0 | 0

## 19. Display the total number of orders placed by each customer.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
Product
  Columns
    ProductID (int)
    Name (Name)
    ProductNumber (nvarchar(15))
    Color (nvarchar(15))
    StandardCost (money)
    ListPrice (money)
    Size (nvarchar(5))
    Weight (decimal(8,2))
    ProductCategoryID (int)
    ProductModelID (int)
    SellStartDate (datetime)
    SellEndDate (datetime)
    DiscontinuedDate (datetime)
    ThumbNailPhoto (varbinary)
    ThumbNailPhotoFileName
    rowguid (uniqueidentifier)
    ModifiedDate (datetime)
  ...
  /* Pranav Walia */
  ...
Results 1 ×
SELECT c.CustomerID, COUNT(soh.SalesOrderID) AS OrderCount
FROM [SalesLT].[Customer] c
JOIN [SalesLT].[SalesOrderHeader] soh ON c.CustomerID = soh.CustomerID
GROUP BY c.CustomerID;
```

	CustomerID	OrderCount
1	29,485	1
2	29,531	1
3	29,546	1
4	29,568	1
5	29,584	1
6	29,612	1
7	29,638	1
8	29,644	1
9	29,653	1
10	29,660	1
11	29,736	1
12	29,741	1
13	29,781	1
14	29,796	1
15	29,847	1
...	29,877	1

Refresh Save Cancel Export data 200 32 32 row(s) fetched - 0.872s, on 2024-02-04 at 14:26:52

## 20. Find the product with the highest standard cost.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
AdventureWorks2022 - dbeverincedo.database.windows.net
azuretraining - dbeverincedo.database.windows.net
  Databases
    azuretraining
      Schemas
        dbo
        SalesLT
          Tables
            Address
            Customer
            CustomerAddress
            Product
            ProductCategory
            ProductDescription
            ProductModel
            ProductModelProductDescription
            SalesOrderDetail
            SalesOrderHeader
            External Tables
            Vlma...
  Project - General
    Name | DataSource
  Bookmarks
  Diagrams
  Scripts
Results 1 ×
SELECT TOP 1 *
FROM [SalesLT].[Product]
ORDER BY StandardCost DESC;
/* Pranav Walia */
```

ProductID	Name	ProductNumber	Color	StandardCost	ListPrice	Size	Weight	ProductCategoryID
749	Road-150 Red, 62	BK-R93R-62	Red	2171.2942	3578.2700	62	6,803.85	6

Refresh Save Cancel Export data 200 1 1 row(s) fetched - 0.622s (0.001s fetch), on 2024-02-04 at 14:27:07

## 21. Retrieve the customer names and their corresponding order count.

The screenshot shows the DBeaver interface with the following details:

- File Bar:** File, Edit, Navigate, Search, SQL Editor, Database, Window, Help.
- Toolbars:** Commit, Rollback, Auto, azuretraining, dbo@azuretraining.
- Database Navigator:** Projects, azurereaining, Script.
- Script Tab:** Contains a SQL query:

```
SELECT c.FirstName AS CustomerFirstName, c.LastName AS CustomerLastName,
       COUNT(soh.SalesOrderID) AS OrderCount
  FROM [SalesLT].[Customer] c
  JOIN [SalesLT].[SalesOrderHeader] soh ON c.CustomerID = soh.CustomerID
 GROUP BY c.FirstName, c.LastName;
```
- Results Tab:** Shows the results of the query:

	CustomerFirstName	CustomerLastName	OrderCount
1	Catherine	Abel	1
2	Christopher	Beck	1
3	Donald	Blanton	1
4	Cory	Booth	1
5	Walter	Brian	1
6	Richard	Byham	1
7	Frank	Campbell	1
8	Rosmarie	Carroll	1
9	Brigid	Cavendish	1
10	Anthony	Chor	1
11	Pei	Chow	1
12	Terry	Eminizer	1
13	Janeth	Esteves	1
14	Guy	Gilbert	1
15	Jon	Grande	1
16	David	Hodgson	1
- Bottom Bar:** Refresh, Save, Cancel, Smart Insert, 6 : 1 : 256, Set: 0 | 0, 200, 32.

22. Retrieve the order date and total due amount for orders with a due amount greater than 500.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects <azuretraining> Script

Enter a part of object name here

SELECT OrderDate, TotalDue  
FROM [SalesLT].[SalesOrderHeader]  
WHERE TotalDue > 500;  
/\* Pranav Walia \*/

Results 1 ×

Grid

	OrderDate	TotalDue
1	2008-06-01 00:00:00.000	972.7850
2	2008-06-01 00:00:00.000	42452.6519
3	2008-06-01 00:00:00.000	43962.7901
4	2008-06-01 00:00:00.000	92663.5609
5	2008-06-01 00:00:00.000	119960.8240
6	2008-06-01 00:00:00.000	63686.2708
7	2008-06-01 00:00:00.000	86222.8072
8	2008-06-01 00:00:00.000	1261.4440
9	2008-06-01 00:00:00.000	3754.9733
10	2008-06-01 00:00:00.000	2228.0566
11	2008-06-01 00:00:00.000	39531.6085
12	2008-06-01 00:00:00.000	45992.3665
13	2008-06-01 00:00:00.000	2711.4098
14	2008-06-01 00:00:00.000	665.4251
15	2008-06-01 00:00:00.000	15275.1977
16	2008-06-01 00:00:00.000	3673.3249
17	2008-06-01 00:00:00.000	100.0000
18	2008-06-01 00:00:00.000	100.0000
19	2008-06-01 00:00:00.000	100.0000
20	2008-06-01 00:00:00.000	100.0000
21	2008-06-01 00:00:00.000	100.0000
22	2008-06-01 00:00:00.000	100.0000
23	2008-06-01 00:00:00.000	100.0000
24	2008-06-01 00:00:00.000	100.0000
25	2008-06-01 00:00:00.000	100.0000
26	2008-06-01 00:00:00.000	100.0000
27	2008-06-01 00:00:00.000	100.0000

Text

Record

Refresh Save Cancel Smart Insert Export data 200 27 27 row(s) fetched - 0.490s, on 2024-02-04 at 14:35:51

23. Retrieve the distinct values of the city.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
SQL Commit Rollback Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
Schemas
  dbo
  SalesLT
    Tables
      Address
      Customer
      CustomerAddress
      Product
      ProductCategory
      ProductDescription
      ProductModel
      ProductModelProductDescription
      SalesOrderDetail
      SalesOrderHeader
    External Tables
    Views
    Indexes
    Procedures
    Sequences
    Synonyms
Project - General
Name | DataSource
Bookmarks
Diagrams
Scripts
Results 1 x
SELECT DISTINCT City
FROM [SalesLT].[Address];
/* Pranav Walia */
Grid
City
1 Abingdon
2 Albany
3 Alhambra
4 Alpine
5 Arlington
6 Auburn
7 Aurora
8 Austin
9 Baldwin Park
10 Barrie
11 Barstow
12 Basingstoke Hants
13 Baytown
14 Beaverton
15 Bell Gardens
Record
Refresh Save Cancel Export data 200 200+
200 row(s) fetched - 0.340s (0.001s fetch), on 2024-02-04 at 14:38:09
IST en Writable Smart Insert 2:26:47 Sel: 0 | 0

```

**24. Retrieve the product names and their quantities for products with a total quantity greater than 40 across all orders.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
SQL Commit Rollback Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
Schemas
  dbo
  SalesLT
    Tables
      Address
      Customer
      CustomerAddress
      Product
      ProductCategory
      ProductDescription
      ProductModel
      ProductModelProductDescription
      SalesOrderDetail
      SalesOrderHeader
    External Tables
    Views
    Indexes
    Procedures
    Sequences
    Synonyms
Project - General
Name | DataSource
Bookmarks
Diagrams
Scripts
Results 1 x
SELECT p.Name, SUM(sod.OrderQty) AS TotalQuantity
FROM [SalesLT].[Product] p
JOIN [SalesLT].[SalesOrderDetail] sod ON p.ProductID = sod.ProductID
GROUP BY p.Name
HAVING SUM(sod.OrderQty) > 40;
/* Pranav Walia */
Grid
Name TotalQuantity
1 AWC Logo Cap 52
2 Bike Wash - Dissolver 55
3 Classic Vest, S 87
4 Hydration Pack - 70 oz. 50
5 Long-Sleeve Logo Jersey, L 51
6 Racing Socks, L 51
7 Road-350-W Yellow, 48 42
8 Short-Sleeve Classic Jersey, L 51
9 Short-Sleeve Classic Jersey, XL 57
10 Sport-100 Helmet, Black 51
11 Water Bottle - 30 oz. 54
12 Women's Mountain Shorts, S 48
Record
Refresh Save Cancel Export data 200 12
12 row(s) fetched - 0.792s, on 2024-02-04 at 14:42:33
IST en Writable Smart Insert 5:30:195 Sel: 0 | 0

```

**25. Find the customers who have placed orders and their total order amount.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
Schemas
  dbo
    SalesLT
      Tables
        Address
        Customer
        CustomerAddress
        Product
        ProductCategory
        ProductDescription
        ProductModel
        ProductModelProductDescription
        SalesOrderDetail
        SalesOrderHeader
        External Tables
        Views
        Indexes
        Procedures
        Sequences
        Synonyms
Project - General
Name | DataSource
Bookmarks
Diagrams
Scripts
CustomerID FirstName LastName TotalOrderAmount
1 29,485 Catherine Abel 43962.7901
2 29,531 Cory Booth 7330.8972
3 29,546 Christopher Beck 98138.2131
4 29,568 Donald Blanton 2669.3183
5 29,584 Walter Brian 272.6468
6 29,612 Richard Byham 608.1766
7 29,638 Rosmarie Carroll 2361.6403
8 29,644 Brigid Cavendish 1170.5376
9 29,653 Pei Chow 15275.1977
10 29,660 Anthony Chor 63686.2708
11 29,736 Terry Eminizer 119960.8240
12 29,741 Janeth Esteves 43.0437
13 29,781 Guy Gilbert 117.7276
14 29,796 Jon Grande 86222.8072
15 29,847 David Hodgson 972.7850
16 29,877 Joyce Jarvis 14017.9083
32 row(s) fetched - 0.940s, on 2024-02-04 at 14:45:03
IST en Writable Smart Insert 5 : 1 : 235 Sel: 0 | 0
```

**26. Show the product names and their respective sizes for products with sizes specified.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
Schemas
  dbo
    SalesLT
      Tables
        Address
        Customer
        CustomerAddress
        Product
        ProductCategory
        ProductDescription
        ProductModel
        ProductModelProductDescription
        SalesOrderDetail
        SalesOrderHeader
        External Tables
        Views
        Indexes
        Procedures
        Sequences
        Synonyms
Project - General
Name | DataSource
Bookmarks
Diagrams
Scripts
Name Size
1 HL Road Frame - Black, 58 58
2 HL Road Frame - Red, 58 58
3 Mountain Bike Socks, M M
4 Mountain Bike Socks, L L
5 Long-Sleeve Logo Jersey, S S
6 Long-Sleeve Logo Jersey, M M
7 Long-Sleeve Logo Jersey, L L
8 Long-Sleeve Logo Jersey, XL XL
9 HL Road Frame - Red, 62 62
10 HL Road Frame - Red, 44 44
11 HL Road Frame - Red, 48 48
12 HL Road Frame - Red, 52 52
13 HL Road Frame - Red, 56 56
14 LL Road Frame - Black, 58 58
15 LL Road Frame - Black, 60 60
16 LL Road Frame - Black, 62 62
200 row(s) fetched - 0.645s, on 2024-02-04 at 14:45:18
IST en Writable Smart Insert 4 : 1 : 78 Sel: 0 | 0
```

**27. Retrieve the customer names and email addresses for customers who do not have a sales representative.**

DBeaver 23.3.2 - <azureraining> Script

File Edit Navigate Search SQL Editor Database Window Help

SQL Commit Rollback Auto azuretraining dbo@azureraining

Database Navigator Projects

Enter a part of object name here

Schemas

- dbo
- SalesLT
  - Tables
    - Address
    - Customer
    - CustomerAddress
    - Product
    - ProductCategory
    - ProductDescription
    - ProductModel
    - ProductModelProductDescription
    - SalesOrderDetail
    - SalesOrderHeader
    - External Tables
    - Views
    - Indexes
    - Procedures
    - Sequences
    - Synonyms

Project - General

Name | DataSource

Bookmarks Diagrams Scripts

Record

Grid

Text

Results 1

```
SELECT FirstName, LastName, EmailAddress
FROM [SalesLT].[Customer]
WHERE ISNUMERIC(SalesPerson) = 0 OR SalesPerson IS NULL;
```

	FirstName	LastName	EmailAddress
1	Orlando	Gee	orlando0@adventure-works.com
2	Keith	Harris	keith0@adventure-works.com
3	Donna	Carreras	donna0@adventure-works.com
4	Janet	Gates	janet1@adventure-works.com
5	Lucy	Harrington	lucy0@adventure-works.com
6	Rosmarie	Carroll	rosmarie0@adventure-works.com
7	Dominic	Gash	dominic0@adventure-works.com
8	Kathleen	Garza	kathleen0@adventure-works.com
9	Katherine	Harding	katherine0@adventure-works.com
10	Johnny	Caprio	johnny0@adventure-works.com
11	Christopher	Beck	christopher1@adventure-works.com
12	David	Liu	david20@adventure-works.com
13	John	Beaver	john8@adventure-works.com
14	Jean	Handley	jean1@adventure-works.com
15	Jinghao	Liu	jinghao1@adventure-works.com

Refresh Save Cancel Export data 200 200+

200 row(s) fetched - 0.314s (0.001s fetch), on 2024-02-04 at 14:47:07

IST en Writable Smart Insert 4 : 1 : 127 Sel: 0 | 0

## 28. List the products with the lowest list price.

DBeaver 23.3.2 - <azureraining> Script

File Edit Navigate Search SQL Editor Database Window Help

SQL Commit Rollback Auto azuretraining dbo@azureraining

Database Navigator Projects

Enter a part of object name here

Schemas

- dbo
- SalesLT
  - Tables
    - Address
    - Customer
    - CustomerAddress
    - Product
    - ProductCategory
    - ProductDescription
    - ProductModel
    - ProductModelProductDescription
    - SalesOrderDetail
    - SalesOrderHeader
    - External Tables
    - Views
    - Indexes
    - Procedures
    - Sequences
    - Synonyms

Project - General

Name | DataSource

Bookmarks Diagrams Scripts

Record

Grid

Text

Results 1

```
SELECT TOP 1 *
FROM [SalesLT].[Product]
ORDER BY ListPrice;
```

ProductID	Name	ProductNumber	Color	StandardCost	ListPrice	Size	Weight	ProductCategoryID
873	Patch Kit/8 Patches	PK-7098	[NULL]	0.8565	2.2900	[NULL]	[NULL]	41

Refresh Save Cancel Export data 200 1 1 row(s) fetched - 0.301s, on 2024-02-04 at 14:49:15

IST en Writable Smart Insert 4 : 1 : 63 Sel: 0 | 0

## 29. Find the total sales amount for each product category.

DBeaver 23.3.2 - <azuretraining> Script

```

SELECT pc.Name AS ProductCategory, SUM(soh.TotalDue) AS TotalSalesAmount
FROM [SalesLT].[Product] p
JOIN [SalesLT].[ProductCategory] pc ON p.ProductCategoryID = pc.ProductCategoryID
JOIN [SalesLT].[SalesOrderDetail] sod ON p.ProductID = sod.ProductID
JOIN [SalesLT].[SalesOrderHeader] soh ON sod.SalesOrderID = soh.SalesOrderID
GROUP BY pc.Name;
/*
Pranav Walia */

```

Results 1 ×

	ProductCategory	TotalSalesAmount
1	Bike Racks	526685.1306
2	Bottles and Cages	522900.9055
3	Bottom Brackets	492511.8383
4	Brakes	302387.2668
5	Caps	555831.2572
6	Chains	240564.5100
7	Cleaners	538058.3756
8	Cranksets	494541.4147
9	Derailleurs	437753.4689
10	Gloves	1109114.6917
11	Handlebars	1019730.9050
12	Helmets	1680620.8122
13	Hydration Packs	565235.8298
14	Jerseys	3020346.9345
15	Mountain Bikes	4307066.3148

26 row(s) fetched - 0.878s, on 2024-02-04 at 14:49:38

30. retrieve the highest total due amount and the order date.

DBeaver 23.3.2 - <azuretraining> Script

```

SELECT TOP 1 OrderDate, TotalDue
FROM [SalesLT].[SalesOrderHeader]
ORDER BY TotalDue DESC;
/*
Pranav Walia */

```

Results 1 ×

	OrderDate	TotalDue
1	2008-06-01 00:00:00.000	119960.8240

1 row(s) fetched - 0.234s, on 2024-02-04 at 14:55:17

Intermediate to Advance:

1. Write a query to retrieve the names and email addresses of all customers from the AdventureWorksLT database.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

SQL Commit Rollback Auto azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Schemas

- dbo
- SalesLT
  - Tables
    - Address
    - Customer
    - CustomerAddress
    - Product
    - ProductCategory
    - ProductDescription
    - ProductModel
    - ProductModelProductDescription
    - SalesOrderDetail
    - SalesOrderHeader
    - External Tables
    - Views
    - Indexes
    - Procedures
    - Sequences
    - Synonyms

Project - General

Name: Data Source

Bookmarks Diagrams Scripts

CustomerID FirstName LastName EmailAddress

```
SELECT CustomerID, FirstName, LastName, EmailAddress
FROM SalesLT.Customer
/* Pranav Walia */
```

Results 1

	CustomerID	FirstName	LastName	EmailAddress
1	Orlando	Gee	orlando0@adventure-works.com	
2	Keith	Harris	keith0@adventure-works.com	
3	Donna	Carreras	donna0@adventure-works.com	
4	Janet	Gates	janet1@adventure-works.com	
5	Lucy	Harrington	lucy0@adventure-works.com	
6	Rosmarie	Carroll	rosmarie0@adventure-works.com	
7	Dominic	Gash	dominic0@adventure-works.com	
8	Kathleen	Garza	kathleen0@adventure-works.com	
9	Katherine	Harding	katherine0@adventure-works.com	
10	Johnny	Caprio	johnny0@adventure-works.com	
11	Christopher	Beck	christopher1@adventure-works.com	
12	David	Liu	david20@adventure-works.com	
13	John	Beaver	john8@adventure-works.com	
14	Jean	Handley	jean1@adventure-works.com	
15	Jinghao	Liu	jinghao1@adventure-works.com	
16	Linda	Burnett	linda4@adventure-works.com	

Refresh Save Cancel K Export data 200 200+ IST en Writable Smart Insert 3 : 1 : 78 Sel: 0 | 0

2. Create a query that lists the total sales amount for each product category in AdventureWorksLT, including the category name and total sales.

DBeaver 23.3.2 - <azuretraining> Script

File Edit Navigate Search SQL Editor Database Window Help

SQL Commit Rollback Auto azuretraining dbo@azuretraining

Database Navigator Projects

Enter a part of object name here

Schemas

- dbo
- SalesLT
  - Tables
    - Address
    - Customer
    - CustomerAddress
    - Product
    - ProductCategory
    - ProductDescription
    - ProductModel
    - ProductModelProductDescription
    - SalesOrderDetail
    - SalesOrderHeader
    - External Tables
    - Views
    - Indexes
    - Procedures
    - Sequences
    - Synonyms

Project - General

Name: Data Source

Bookmarks Diagrams Scripts

CategoryName ProductName TotalSales

```
SELECT pc.Name AS CategoryName, p.Name AS ProductName, SUM(soh.TotalDue) AS TotalSales
FROM SalesLT.ProductCategory pc
JOIN SalesLT.Product p ON pc.ProductCategoryID = p.ProductCategoryID
JOIN SalesLT.SalesOrderDetail sod ON p.ProductID = sod.ProductID
JOIN SalesLT.SalesOrderHeader soh ON sod.SalesOrderID = soh.SalesOrderID
GROUP BY pc.Name, p.Name
ORDER BY TotalSales DESC;
/* Pranav Walia */
```

Results 1

	CategoryName	ProductName	TotalSales
1	Helmets	Sport-100 Helmet, Red	631381.1315
2	Jerseys	Long-Sleeve Logo Jersey, L	588078.3622
3	Hydration Packs	Hydration Pack - 70 oz.	565235.8298
4	Caps	AWC Logo Cap	555831.2572
5	Jerseys	Short-Sleeve Classic Jersey, L	541813.3489
6	Vests	Classic Vest, S	540975.6857
7	Jerseys	Short-Sleeve Classic Jersey, XL	540703.0389
8	Cleaners	Bike Wash - Dissolver	538058.3756
9	Bike Racks	Hitch Rack - 4-Bike	526685.1306
10	Helmets	Sport-100 Helmet, Blue	526456.5028
11	Jerseys	Short-Sleeve Classic Jersey, S	525452.4962
12	Jerseys	Long-Sleeve Logo Jersey, M	525452.4962
13	Bottles and Cages	Water Bottle - 30 oz.	522900.9055
14	Helmets	Sport-100 Helmet, Black	522783.1779
15	Vests	Classic Vest, M	522783.1779
16	Gloves	Half-Finger Gloves, M	522783.1779

Refresh Save Cancel K Export data 200 142 IST en Writable Smart Insert 8 : 1 : 384 Sel: 0 | 0

3. Identify the top 5 products in terms of quantity sold, including product name, product ID, and total quantity sold.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
SQL Commit Rollback Auto azuretraining dbo@azuretraining
Database Navigator Projects
Enter a part of object name here
Schemas
  dbo
  SalesLT
    Tables
      Address
      Customer
      CustomerAddress
      Product
      ProductCategory
      ProductDescription
      ProductModel
      ProductModelProductDescription
      SalesOrderDetail
      SalesOrderHeader
      External Tables
      Views
      Indexes
      Procedures
      Sequences
      Synonyms
Project - General
Name
  Bookmarks
  Diagrams
  Scripts
Results 1 ×
SELECT TOP 5 p.Name AS ProductName, p.ProductID, SUM(sod.OrderQty) AS TotalQuantitySold
FROM SalesLT.Product p
JOIN SalesLT.SalesOrderDetail sod ON p.ProductID = sod.ProductID
GROUP BY p.Name, p.ProductID
ORDER BY TotalQuantitySold DESC;
/*
  Pranav Walia */

```

	ProductName	ProductID	TotalQuantitySold
1	Classic Vest, S	864	87
2	Short-Sleeve Classic Jersey, XL	884	57
3	Bike Wash - Dissolver	877	55
4	Water Bottle - 30 oz.	870	54
5	AWC Logo Cap	712	52

Refresh Save Cancel Export data 200 5 5 row(s) fetched - 0.234s, on 2024-02-04 at 14:58:54 IST en Writable Smart Insert 6:1:243 Sel: 0|0

**4. Find the customers who have placed orders for more than three different products. Retrieve the customer names and the count of unique products they have ordered.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
SQL Commit Rollback Auto azuretraining dbo@azuretraining
SELECT
  c.CustomerID,
  c.FirstName,
  c.LastName,
  COUNT(DISTINCT sod.ProductID) AS UniqueProductCount
FROM
  SalesLT.Customer c
JOIN
  SalesLT.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID
JOIN
  SalesLT.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID
GROUP BY
  c.CustomerID, c.FirstName, c.LastName
HAVING
  COUNT(DISTINCT sod.ProductID) > 3;
/*
  Pranav Walia */

```

	CustomerID	FirstName	LastName	UniqueProductCount
1	29.485	Catherine	Abel	43
2	29.531	Cory	Booth	6
3	29.546	Christopher	Beck	42
4	29.568	Donald	Blanton	8
5	29.638	Rosmarie	Carroll	5
6	29.653	Pei	Chow	17
7	29.660	Anthony	Chor	20
8	29.736	Terry	Eminizer	43
9	29.796	Jon	Grande	46
10	29.877	Joyce	Jarvis	8
11	29.922	Pamala	Kotc	30

Refresh Save Cancel Export data 200 21 21 row(s) fetched - 0.919s, on 2024-02-04 at 15:07:49 IST en Writable Smart Insert 17:19:422 Sel: 0|0

**5. Find the products that have been ordered the most in terms of quantity. Retrieve the product name, product ID, and the total quantity ordered. Display the top 3 products based on the quantity ordered.**

DBeaver 23.3.2 - <azuretraining> Script

```

SELECT TOP 3
    p.Name AS ProductName,
    p.ProductID,
    SUM(sod.OrderQty) AS TotalQuantityOrdered
FROM
    SalesLT.Product p
JOIN
    SalesLT.SalesOrderDetail sod ON p.ProductID = sod.ProductID
GROUP BY
    p.Name, p.ProductID
ORDER BY
    TotalQuantityOrdered DESC;
/* Pranav Walia */

```

Results 1 ×

	ProductName	ProductID	TotalQuantityOrdered
1	Classic Vest, S	864	87
2	Short-Sleeve Classic Jersey, XL	884	57
3	Bike Wash - Dissolver	877	55

Refresh Save Cancel Export data 200 3 3 row(s) fetched - 0.237s, on 2024-02-04 at 15:12:59 IST | en | Writable Smart Insert 13 : 1 : 284 Sel: 0 | 0

**6. Identify customers who have not placed any orders in the last 6 months. Retrieve customer names and email addresses for those customers.**

DBeaver 23.3.2 - <azuretraining> Script

```

SELECT
    c.FirstName,
    c.LastName,
    c.EmailAddress
FROM
    SalesLT.Customer c
WHERE
    NOT EXISTS (
        SELECT 1
        FROM
            SalesLT.SalesOrderHeader soh
        WHERE
            soh.CustomerID = c.CustomerID
            AND soh.OrderDate >= DATEADD(MONTH, -6, GETDATE())
    );
/* Pranav Walia */

```

Results 1 ×

	FirstName	LastName	EmailAddress
1	Orlando	Gee	orlando0@adventure-works.com
2	Keith	Harris	keith0@adventure-works.com
3	Donna	Carreras	donna0@adventure-works.com
4	Janet	Gates	janet1@adventure-works.com
5	Lucy	Harrington	lucy0@adventure-works.com
6	Rosmarie	Carroll	rosmarie0@adventure-works.com
7	Dominic	Gash	dominic0@adventure-works.com
8	Kathleen	Garza	kathleen0@adventure-works.com
9	Katherine	Harding	katherine0@adventure-works.com
10	Johnny	Caprio	johnny0@adventure-works.com
11	Christopher	Beck	christopher1@adventure-works.com

Refresh Save Cancel Export data 200 200+ 200 row(s) fetched - 0.470s (0.001s fetch), on 2024-02-04 at 15:15:38 IST | en | Writable Smart Insert 16 : 1 : 322 Sel: 0 | 0

**7. Calculate the average order value for each customer, displaying customer names and their corresponding average order values.**

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
SQL Commit Rollback Auto dbo@azuretraining dbo@azuretraining
<azuretraining> Script
SELECT c.CustomerID, c.FirstName, c.LastName, AVG(soh.TotalDue) AS AverageOrderValue
FROM SalesLT.Customer c
JOIN SalesLT.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID
GROUP BY c.CustomerID, c.FirstName, c.LastName;
/* Pranav Walia */
```

Results 1 ×

	CustomerID	FirstName	LastName	AverageOrderValue
1	29.485	Catherine	Abel	43962.7901
2	29.531	Cory	Booth	7330.8972
3	29.546	Christopher	Beck	98138.2131
4	29.568	Donald	Blanton	2669.3183
5	29.584	Walter	Brian	272.6468
6	29.612	Richard	Byham	608.1766
7	29.638	Rosmarie	Carroll	2361.6403
8	29.644	Brigid	Cavendish	1170.5376
9	29.653	Pei	Chow	15275.1977
10	29.660	Anthony	Chor	63686.2708
11	29.736	Terry	Eminizer	119960.8240

Refresh Save Cancel Export data 200 32 32 row(s) fetched - 0.684s, on 2024-02-04 at 15:16:24 IST en Writable Smart Insert 6 : 19 : 248 Sel: 0 | 0

## 8. Analyze the impact of discounts on sales by calculating the average discount percentage for each product category.

DBeaver 23.3.2 - <azuretraining> Script

```
File Edit Navigate Search SQL Editor Database Window Help
SQL Commit Rollback Auto dbo@azuretraining dbo@azuretraining
<azuretraining> Script
SELECT pc.Name AS CategoryName, AVG(sod.UnitPriceDiscount) AS AvgDiscountPercentage
FROM SalesLT.ProductCategory pc
JOIN SalesLT.Product p ON pc.ProductCategoryID = p.ProductCategoryID
JOIN SalesLT.SalesOrderDetail sod ON p.ProductID = sod.ProductID
GROUP BY pc.Name;
/* Pranav Walia */
```

Results 1 ×

	CategoryName	AvgDiscountPercentage
1	Bike Racks	0.0000
2	Bottles and Cages	0.0057
3	Bottom Brackets	0.0000
4	Brakes	0.0000
5	Caps	0.0022
6	Chains	0.0000
7	Cleaners	0.0071
8	Cranksets	0.0000
9	Derailleurs	0.0000
10	Gloves	0.0000
11	Handlebars	0.0000
12	Helmets	0.0055
13	Hydration Packs	0.0000
14	Jerseys	0.0038
15	Mountain Bikes	0.1085
16	Mountain Frames	0.0000
17	Pedals	0.0000
18	Road Bikes	0.0024
19	Road Frames	0.0000

Refresh Save Cancel Export data 200 26 26 row(s) fetched - 0.708s, on 2024-02-04 at 15:17:19 IST en Writable Smart Insert 6 : 1 : 273 Sel: 0 | 0

## 9. List the top 5 product categories based on the total sales amount. Include the category name, total sales amount, and the average unit price of products in each category.

DBeaver 23.3.2 - <azuretraining> Script

```

SELECT TOP 5
    pc.Name AS CategoryName,
    SUM(sod.LineTotal) AS TotalSalesAmount,
    AVG(p.ListPrice) AS AverageUnitPrice
FROM
    SalesLT.ProductCategory pc
JOIN
    SalesLT.Product p ON pc.ProductCategoryID = p.ProductCategoryID
JOIN
    SalesLT.SalesOrderDetail sod ON p.ProductID = sod.ProductID
GROUP BY
    pc.Name
ORDER BY
    TotalSalesAmount DESC;
/* Pranav Walia */

```

Results 1 ×

	CategoryName	TotalSalesAmount	AverageUnitPrice
1	Touring Bikes	220,655.375796	1484.2640
2	Road Bikes	183,130.296808	1387.1581
3	Mountain Bikes	170,825.886	1267.6900
4	Mountain Frames	54,949.602	650.1427
5	Road Frames	24,346.584	728.8612

Refresh Save Cancel Export data 200 5 5 row(s) fetched - 0.474s, on 2024-02-04 at 15:23:49 IST en Writable Smart Insert 15 : 1 : 376 Sel: 0 | 0

**10.** Retrieve a list of customers who have made purchases in both the Mountain Bikes and Shorts product categories. Include customer names and the count of distinct product categories they have purchased from.

DBeaver 23.3.2 - <azuretraining> Script

```

SELECT
    c.CustomerID,
    c.FirstName,
    c.LastName,
    COUNT(DISTINCT pc.Name) AS DistinctCategoriesPurchased
FROM
    SalesLT.Customer c
JOIN
    SalesLT.SalesOrderHeader soh ON c.CustomerID = soh.CustomerID
JOIN
    SalesLT.SalesOrderDetail sod ON soh.SalesOrderID = sod.SalesOrderID
JOIN
    SalesLT.Product p ON sod.ProductID = p.ProductID
JOIN
    SalesLT.ProductCategory pc ON p.ProductCategoryID = pc.ProductCategoryID
WHERE
    pc.Name IN ('Shorts', 'Mountain Bikes')
GROUP BY
    c.CustomerID, c.FirstName, c.LastName
HAVING
    COUNT(DISTINCT pc.Name) = 2;
/* Pranav Walia */

```

Results 1 ×

	CustomerID	FirstName	LastName	DistinctCategoriesPurchased
1	29,922	Pamala	Kotc	2
2	29,929	Jeffrey	Kurtz	2
3	29,938	Frank	Campbell	2
4	30,019	Matthew	Miller	2
5	30,050	Krishna	Sunkammuralli	2
6	30,113	Raja	Venugopal	2

Refresh Save Cancel Export data 200 6 6 row(s) fetched - 0.680s, on 2024-02-04 at 17:00:55 IST en Writable Smart Insert 17 : 42 : 496 Sel: 0 | 0