

## CL4 Practical 5

```
import seaborn as sns
import pandas as pd
from collections import defaultdict

# Load Titanic dataset from seaborn
df = sns.load_dataset('titanic')

# Drop missing values for relevant columns
df = df[['survived', 'pclass', 'sex', 'age']].dropna()

# _____
# Step 1: Average Age of Deceased Males
# _____
def map_male_age(data):
    for _, row in data.iterrows():
        if row['survived'] == 0 and row['sex'] == 'male':
            yield ('deceased_male_age', row['age'])

def reduce_avg_age(mapped_data):
    total_age = 0
    count = 0
    for key, age in mapped_data:
        total_age += age
        count += 1
    avg_age = total_age / count if count else 0
    return round(avg_age, 2)

# Run step 1
mapped_age = list(map_male_age(df))
avg_age = reduce_avg_age(mapped_age)
print(f"Average age of deceased males: {avg_age}")

# _____
# Step 2: Female Casualties per Class
# _____
def map_female_casualties(data):
    for _, row in data.iterrows():
        if row['survived'] == 0 and row['sex'] == 'female':
            yield (row['pclass'], 1)

def reduce_class_counts(mapped_data):
    counts = defaultdict(int)
    for pclass, count in mapped_data:
        counts[pclass] += count
    return counts
```

```
# Run step 2
mapped_class = list(map_female_casualties(df))
female_casualties = reduce_class_counts(mapped_class)
print("\nFemale casualties per class:")
for pclass in sorted(female_casualties):
    print(f"Class {pclass}: {female_casualties[pclass]}")
```

**Output :**

```
Average age of deceased males: 31.62
```

```
Female casualties per class:
```

```
Class 1: 3
```

```
Class 2: 6
```

```
Class 3: 55
```

## CL4 Practical 6 :

Untitled - Power Query Editor

File Home Transform Add Column View Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Manage Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Whole Number Use First Row as Headers Replace Values Combine

Queries [2]

- Table\_northwind accdb
- Orders

|    | OrderID | CustomerID | EmployeeID | OrderDate           | RequiredDate        | Shipped |
|----|---------|------------|------------|---------------------|---------------------|---------|
| 1  | 10248   | VINET      | 5          | 04-07-1996 00:00:00 | 01-08-1996 00:00:00 | 16-0    |
| 2  | 10249   | TOMSP      | 6          | 05-07-1996 00:00:00 | 16-08-1996 00:00:00 | 10-0    |
| 3  | 10250   | HANAR      | 4          | 08-07-1996 00:00:00 | 05-08-1996 00:00:00 | 12-0    |
| 4  | 10251   | VICTE      | 3          | 08-07-1996 00:00:00 | 05-08-1996 00:00:00 | 15-0    |
| 5  | 10252   | SUPRD      | 4          | 09-07-1996 00:00:00 | 06-08-1996 00:00:00 | 11-0    |
| 6  | 10253   | HANAR      | 3          | 10-07-1996 00:00:00 | 24-07-1996 00:00:00 | 16-0    |
| 7  | 10254   | CHOPS      | 5          | 11-07-1996 00:00:00 | 08-08-1996 00:00:00 | 23-0    |
| 8  | 10255   | RICSU      | 9          | 12-07-1996 00:00:00 | 09-08-1996 00:00:00 | 15-0    |
| 9  | 10256   | WELLI      | 3          | 15-07-1996 00:00:00 | 12-08-1996 00:00:00 | 17-0    |
| 10 | 10257   | HILAA      | 4          | 16-07-1996 00:00:00 | 13-08-1996 00:00:00 | 22-0    |
| 11 | 10258   | ERNSH      | 1          | 17-07-1996 00:00:00 | 14-08-1996 00:00:00 | 23-0    |
| 12 | 10259   | CENTC      | 4          | 18-07-1996 00:00:00 | 15-08-1996 00:00:00 | 25-0    |
| 13 | 10260   | OTTIK      | 4          | 19-07-1996 00:00:00 | 16-08-1996 00:00:00 | 29-0    |
| 14 | 10261   | QUEDE      | 4          | 19-07-1996 00:00:00 | 16-08-1996 00:00:00 | 30-0    |
| 15 | 10262   | RATTC      | 8          | 22-07-1996 00:00:00 | 19-08-1996 00:00:00 | 25-0    |

18 COLUMNS, 830 ROWS

QUERY SETTINGS

PROPERTIES

Name

Orders

APPLIED STEPS

- Source
- Navigation

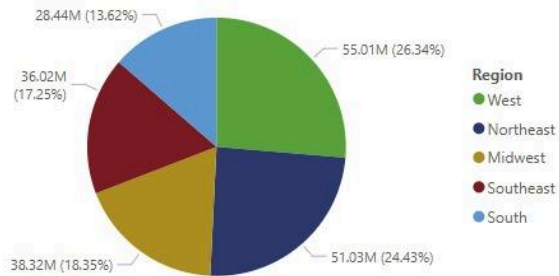
PREVIEW DOWNLOADED AT 12:25

## CL4 Practical 7 :

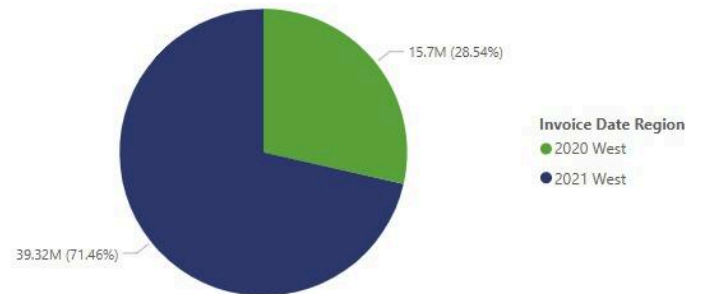
Sum of Total Sales and Sum of Operating Profit by Product



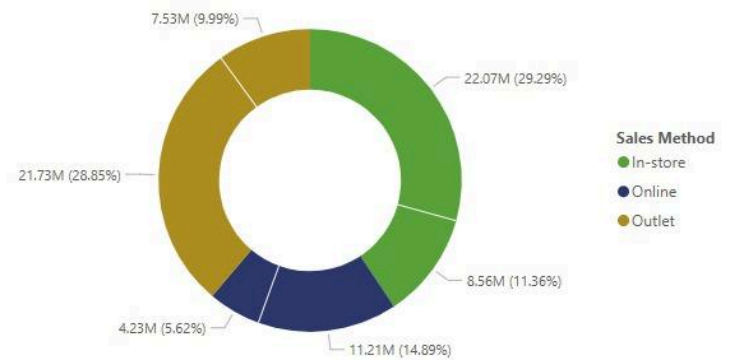
Sum of Total Sales of "Men's Street Footwear" and Region



Men's Footwear Sales Year Wise in West Region



Sum of Total Sales and Sum of Operating Profit by Sales Method



## CL4 Practical 8 :

The screenshot displays the Microsoft SQL Server Management Studio interface. The main window shows a SQL query executed successfully. The query is as follows:

```
USE [AdventureWorks2012]
GO

SELECT [BusinessEntityID]
, [Name]
, [SalesPersonID]
, [Demographics]
, [rowguid]
, [ModifiedDate]
FROM [dbo].[Person]
GO
```

The results pane shows the following data:

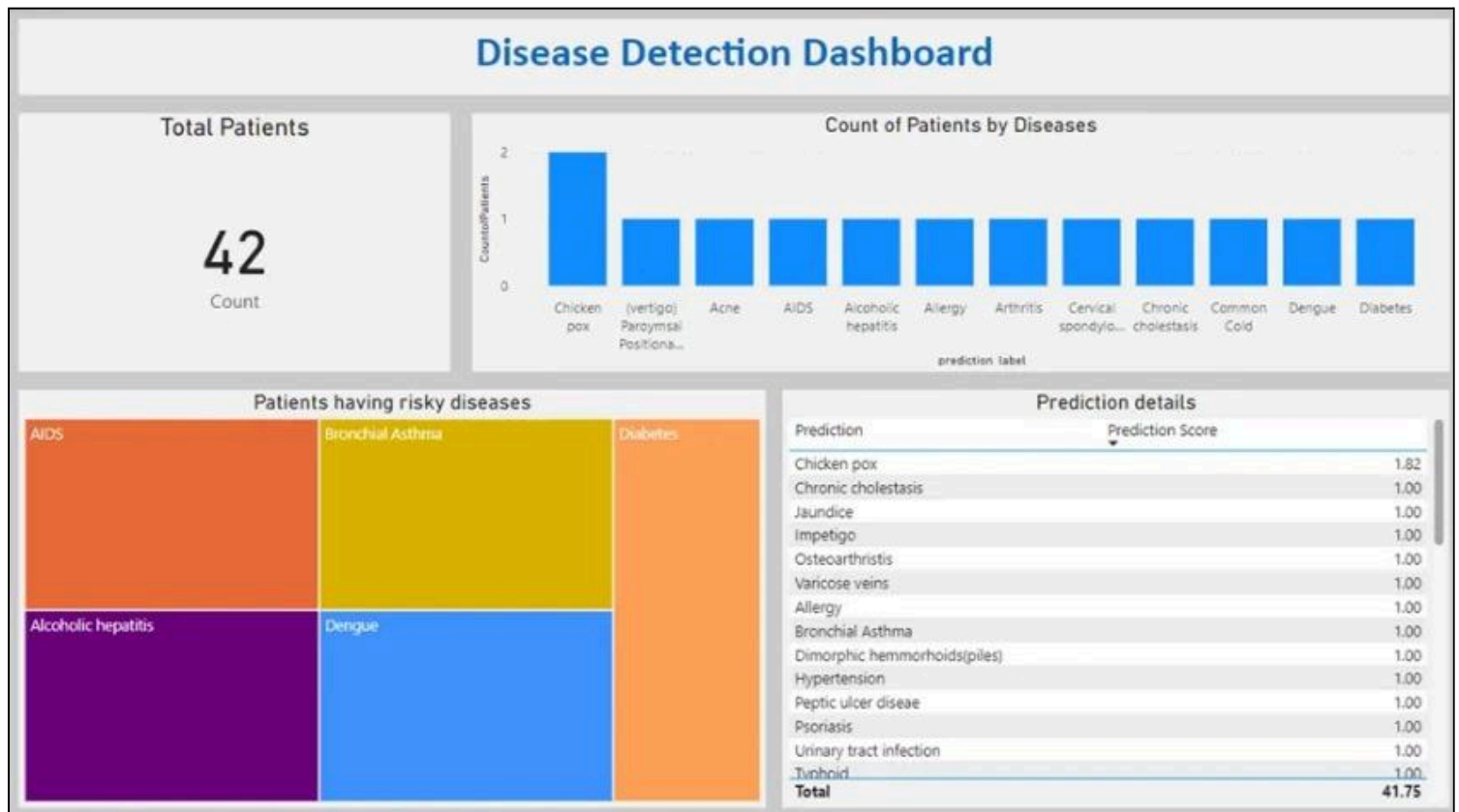
| BusinessEntityID | Name                           | SalesPersonID | Demographics   | rowguid                     |
|------------------|--------------------------------|---------------|--|-----------------------------|
| 292              | Next-Door Bike Store           | 279           | <Store Survey xmlns="http://schemas.microsoft.co..." | A22517E3-B48D-4EBE-B9D9-74  |
| 294              | Professional Sales and Service | 276           | <Store Survey xmlns="http://schemas.microsoft.co..." | B50CA50B-C601-4A13-B07E-2C1 |
| 296              | Riders Company                 | 277           | <Store Survey xmlns="http://schemas.microsoft.co..." | 337C3688-1339-4E1A-A08A-B54 |
| 298              | The Bike Mechanics             | 275           | <Store Survey xmlns="http://schemas.microsoft.co..." | 7894F278-FDC8-4D16-8D75-213 |
| 300              | Nationwide Supply              | 286           | <Store Survey xmlns="http://schemas.microsoft.co..." | C3FC9705-A8C4-4F3A-9550-EB2 |
| 302              | Area Bike Accessories          | 281           | <Store Survey xmlns="http://schemas.microsoft.co..." | 368BE6DD-30E5-49BB-9A86-711 |
| 304              | Bicycle Accessories and Kits   | 283           | <Store Survey xmlns="http://schemas.microsoft.co..." | 35F40636-5105-49D5-869E-27E |
| 306              | Clamps & Brackets Co.          | 275           | <Store Survey xmlns="http://schemas.microsoft.co..." | 64D06BFC-D06D-403C-8C60-C04 |
| 308              | Valley Bicycle Specialists     | 277           | <Store Survey xmlns="http://schemas.microsoft.co..." | 59386B0C-652E-4660-844B-4E1 |

The Properties pane on the right shows the following connection details:

- Connection name: MODEL002/MODEL (M)
- Connection state: Open
- Connection start time: 15-01-2019 13:15:39
- Connection finish time: 15-01-2019 13:15:46
- Connection rows: 701
- Connection elapsed time: 00:00:06.820
- Display name: MODEL002/MODEL
- Login name: MODEL002/Student
- Server name: MODEL002/MODEL
- Server version: 11.0.2100
- Session Tracing ID: SPI0
- SPID: 52

The status bar at the bottom indicates: Query executed successfully. MODEL002/MODEL (11.0 RTM) MODEL002/Student (52) AdventureWorks2012 00:00:06 701 rows

## CL4 Practical 9 :



## CL4 Practical 10 :

