Assignments – list 3

A few tutorial steps (the assignments require to finish this first):

- Run SQL Server Data Tools or Visual Studio – start a new Analysis Services project (Multidimensional)
- Add new Data Source (right side), connect to database server and select AdventureWorksDW
    - Different login options may work depending on installation, on PWr computers use Service Account login
- Add new Data Source View, import tables: FactInternetSales, DimCustomer, DimProduct, DimDate
    - Doubleclick to check the schema – all tables should be connected
- Add new Cube, use existing tables from DSView, select FactInternetSales as fact table, select every NON-KEY attribute as measure, select DimCustomer, DimProduct, DimDate as dimensions.
    - Doubleclick cube to check schema – Fact* should be yellow, Dim* should be blue
    - Doubleclick DimDate, move DayOfMonth, MonthOfYear, Year from right column to left column.
- Right click on Cube and click Process (it will rebuild first), run the procedure, if the installation is correct there should be no errors, otherwise you may need to change options (example: different login, different machine name) or even reinstall.
- Reopen the Cube, go to Browser tab, click the small Excel icon
    - In Excel, put Quantity as measure and Year as Column – try to display it also as Graph

1. Find one more dimension and add it to the project. It needs to be connected to fact table.
2. Add more attributes to all dimensions (move from right to left column).
3. Add hierarchy to DimDate (move from left to center column in appropriate order).
4. Reprocess the project, open it in Excel and create different pivot tables that may be important for a company. You will be asked about interpretation of the tables.
5. Read about this dataset about traffic accidents (you do not need to download it, read the descriptions) https://www.kaggle.com/datasets/daveianhickey/2000-16-traffic-flow-england-scotland-wales
    a. Try to design a simple multidimensional model – identify what is the fact, possible measures and at least three dimensions.