Just IT

B2W group

Apprenticeships | Training | Recruitment

Data Technician

Name:

Course Date:

Table of contents

Day 1: Task 1 2
Day 1: Task 2 4
Day 2: Task 1 5
Day 2: Task 2 9
Day 3: Task 1 13
Day 3: Task 2 15
Day 4: Task 1 16
Day 4: Task 2 17
Course Notes 18
Additional Information 18

Day 1: Task 1

Please research the different versions of Tableau, compare and contrast them below and explain the limited functionality on 'Tableau Public'.

Different Tableau versions

Tableau offers a range of products tailored to different data visualization and analysis needs. As of January 2025, the primary Tableau products include:

Tableau Desktop: A powerful tool for individual data analysis and visualization.

Tableau Server: Enables organizations to host Tableau workbooks and data sources securely on their own infrastructure.

Tableau Cloud: A fully hosted online version of Tableau Server,

allowing for easy sharing and collaboration in the cloud.

Tableau Prep: Assists in preparing and shaping data for analysis.

Tableau Public: A free platform to publicly share visualizations and data stories.

Tableau Reader: Allows users to open and interact with Tableau Desktop–created visualizations.

Tableau Mobile: Provides access to Tableau Server and Tableau Cloud dashboards on mobile devices.

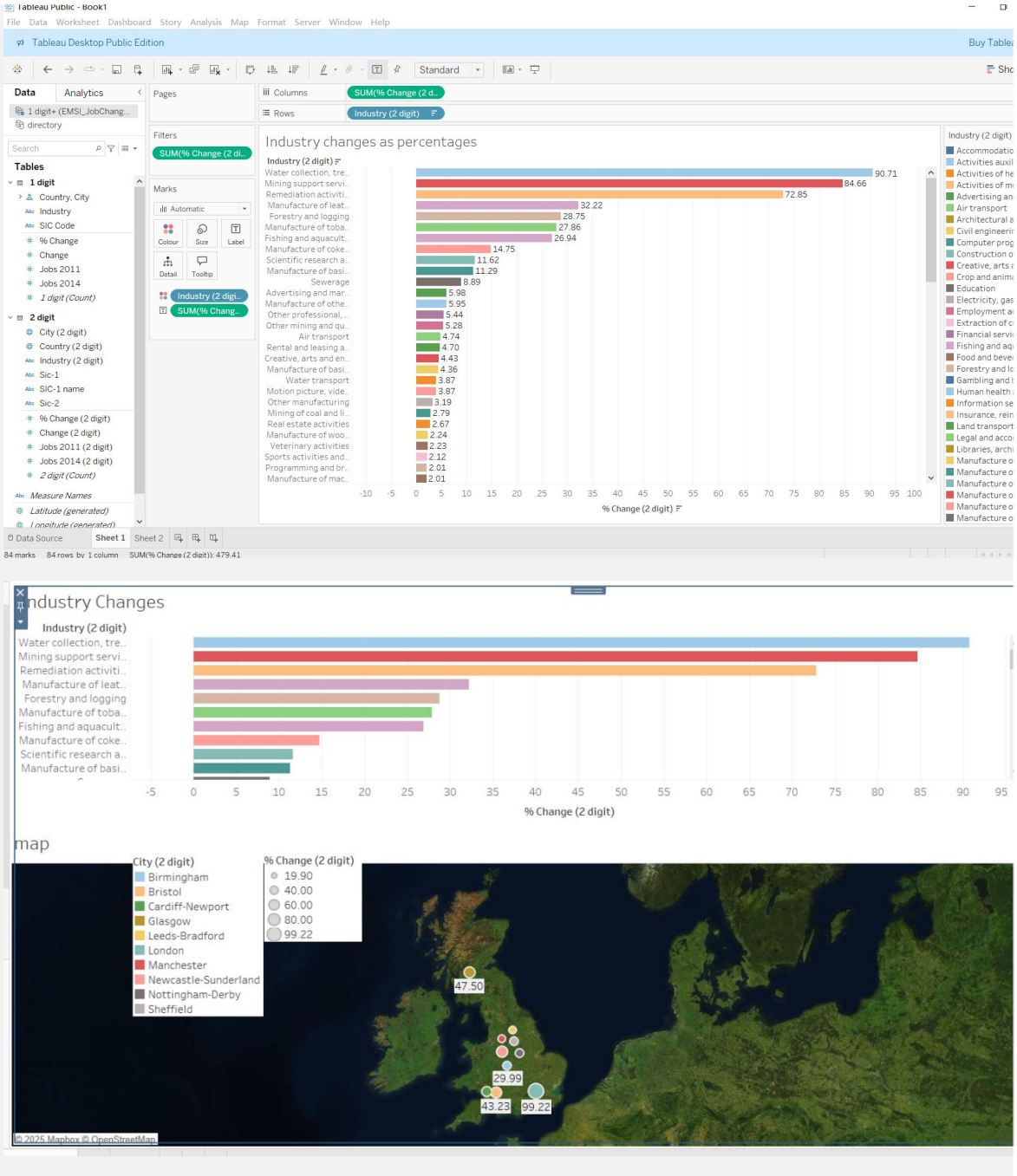
Tableau Bridge: Facilitates connectivity between Tableau Cloud and on-premises data sources.

Tableau Public is a free and powerful platform for creating and sharing interactive visualizations, ideal for beginners and public projects. However, it comes with limitations, including public visibility of content, restricted data connections, no live data updates, and limited advanced features. For private, large-scale, or advanced use, paid Tableau products like Tableau Desktop or Tableau Server are more suitable.

Day 1: Task 2

Using the *EMSI_JobChange_UK* dataset, create your own dashboard, I want to see a bar chart showing percentage change and a UK based map showing the key city locations impacted.

Paste your print screen here

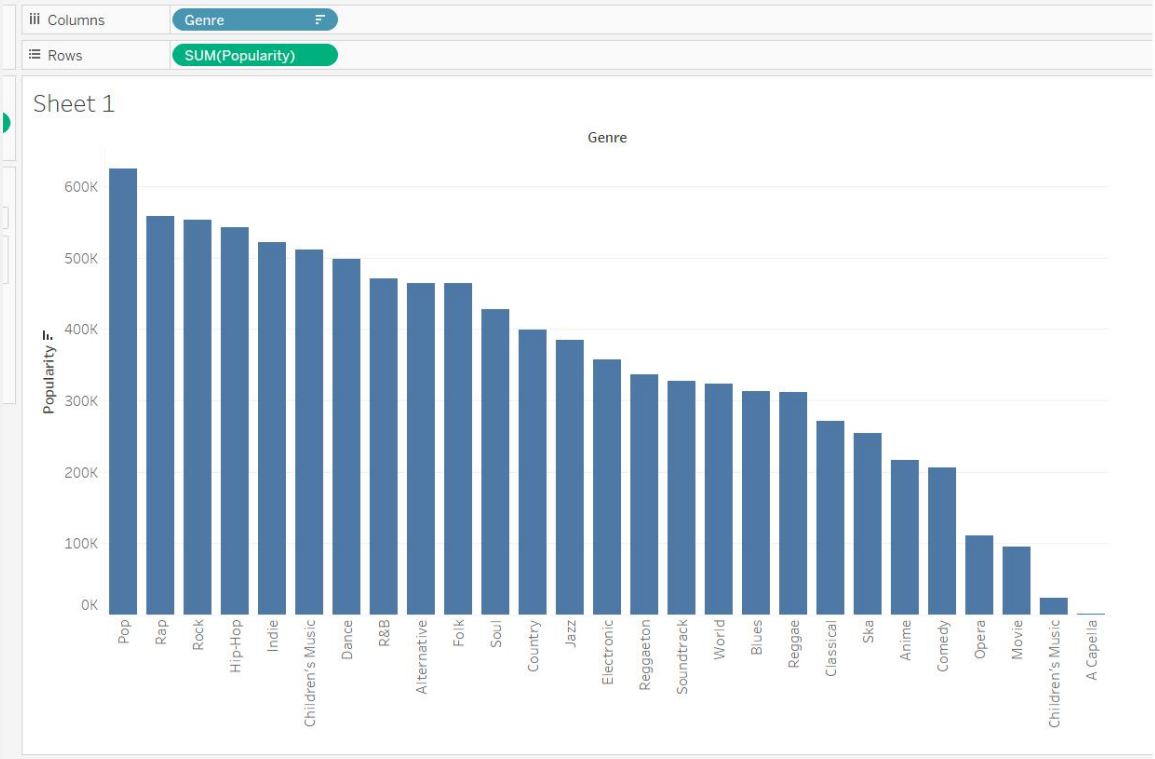


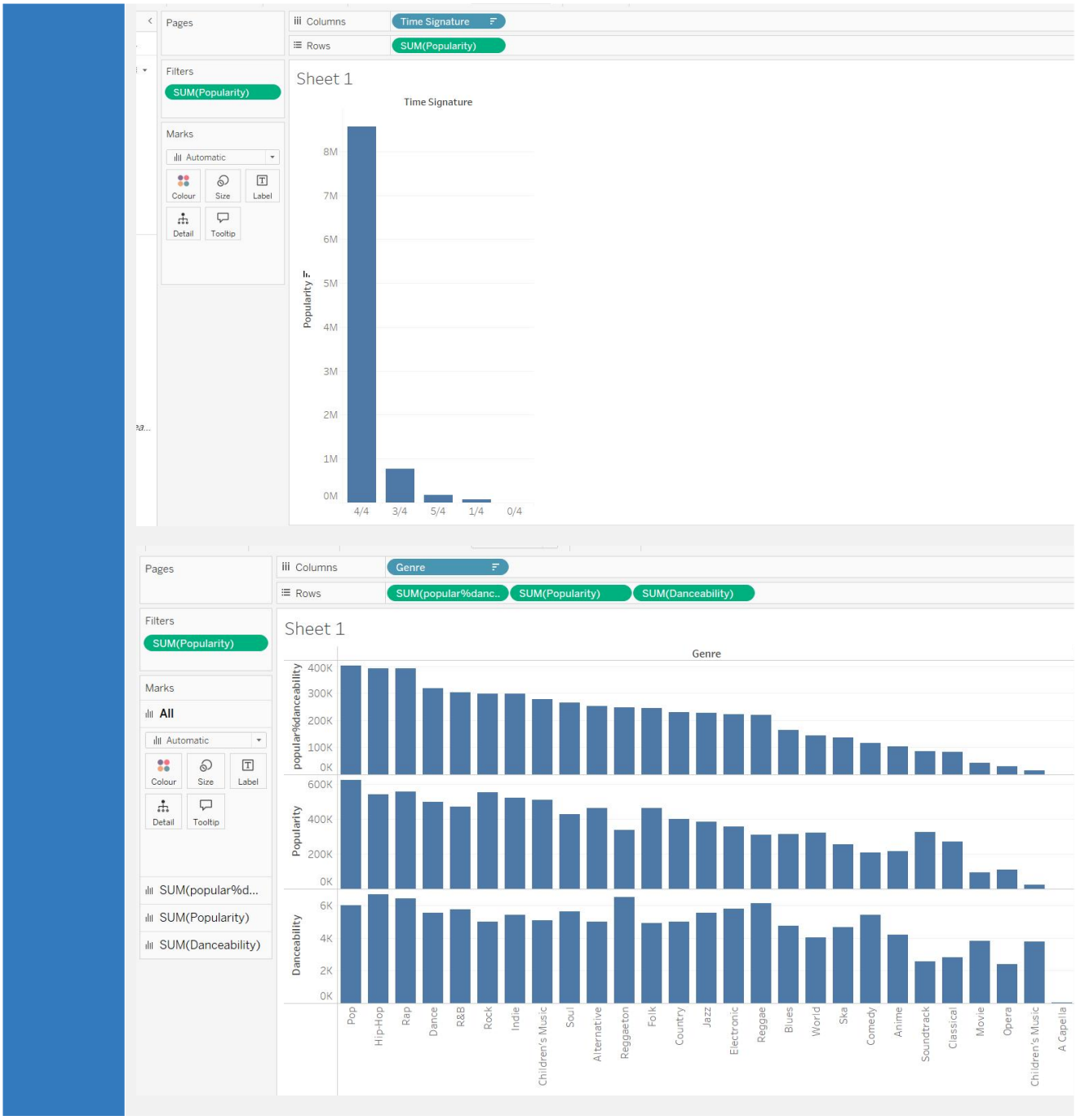
Day 2: Task 1

Using the Spotify data set, conduct an analysis to find trends and key information that could be used by an organisation for future projects.

There is no set scope for the analysis, simply to find trends and document them below:

Paste your print screens here




Pages
Columns
Time Signature
Rows
SUM(Popularity)
Filters
SUM(Popularity)
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Sheet 1
Time Signature
Popularity
8M
7M
6M
5M
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Sheet 1
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popular%danceability
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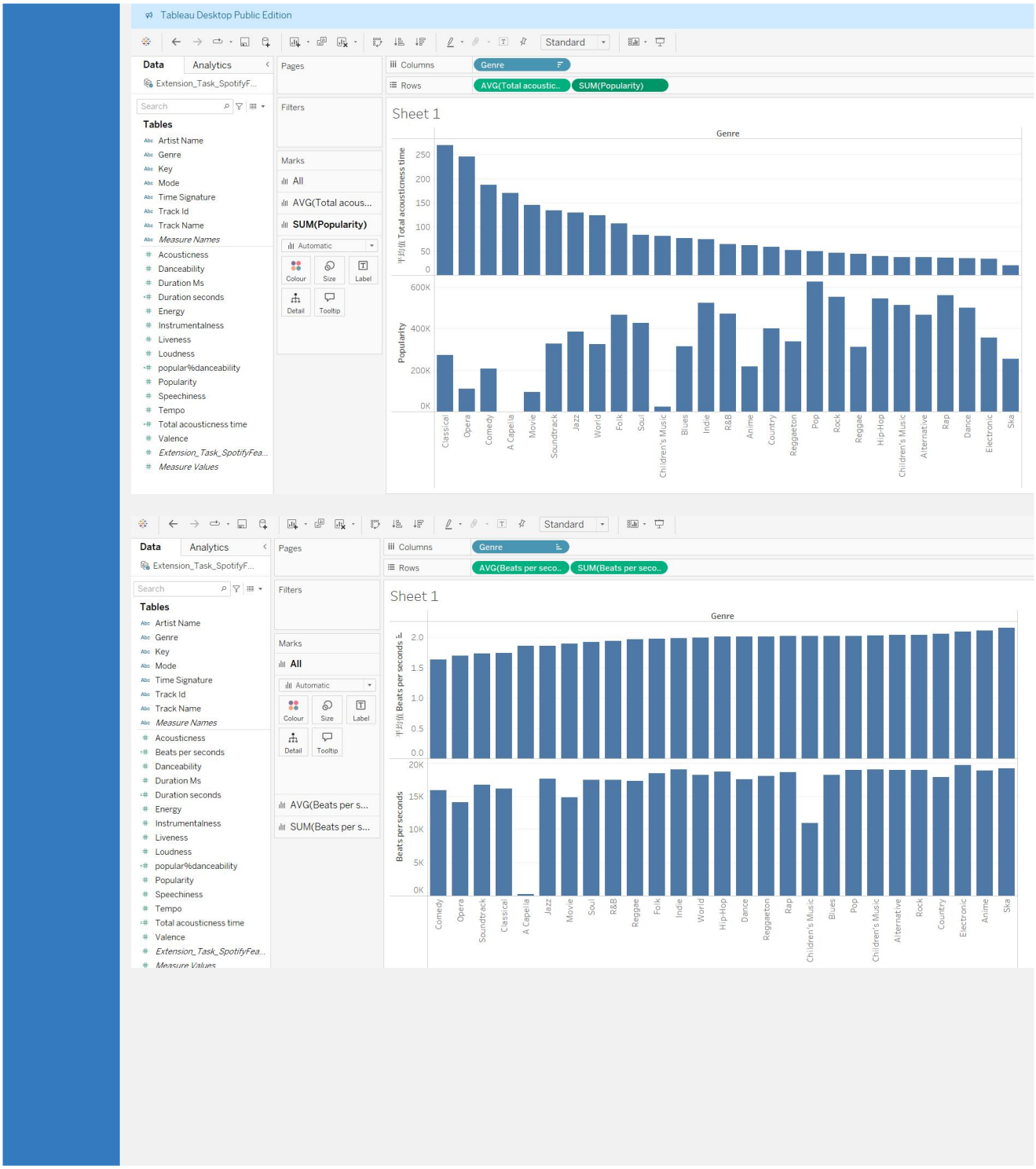
300K
200K
100K
0K
Popularity
600K
400K
200K
0K
Danceability
6K
4K
2K
0K
Pop
Hip-Hop
Rap
Dance
R&B
Rock
Indie
Children's Music
Soul
Alternative
Reggaeton
Folk
Country
Jazz
Electronic
Reggae
Blues
World
Ska
Comedy
Anime
Soundtrack
Classical
Movie
Opera
Children's Music
A Capella



What did you find?

1. The most popular music genre is pop music, while acabella is the least popular genre.

2. The most popular, or say, the most common time signature for music in Spotify is 4/4, while the least popular music time signature is 0/4.

3. By multiplying popularity and danceability, it indicates that

pop music is less danceable than hip-hop music, but hip-hop music and rap gain their popularity from their high danceability.

4. By comparing the average acousticness time of each genre and the popularity of each genre, it shows that audiences are more likely to choose those musics with shorter acousticness time.

5. Get beats per second by dividing the tempo into 60, then compare the average BPS and sum BPS for each genre. From the plot it can be seen that Comedy and Opera have the relatively slowest pace, while the data of Acabella and Children's music have been infected by their lack of sample amounts.

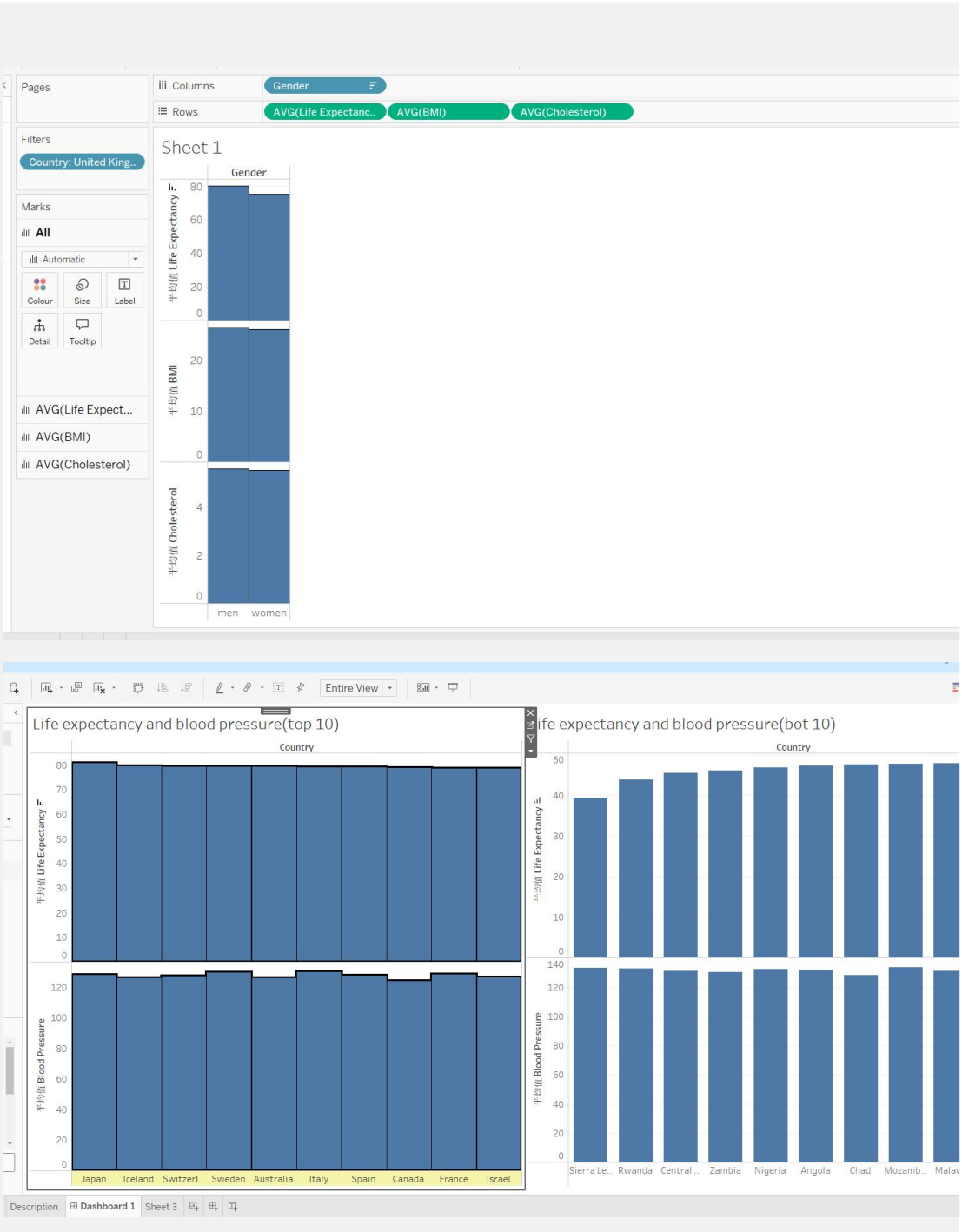
Day 2: Task 2

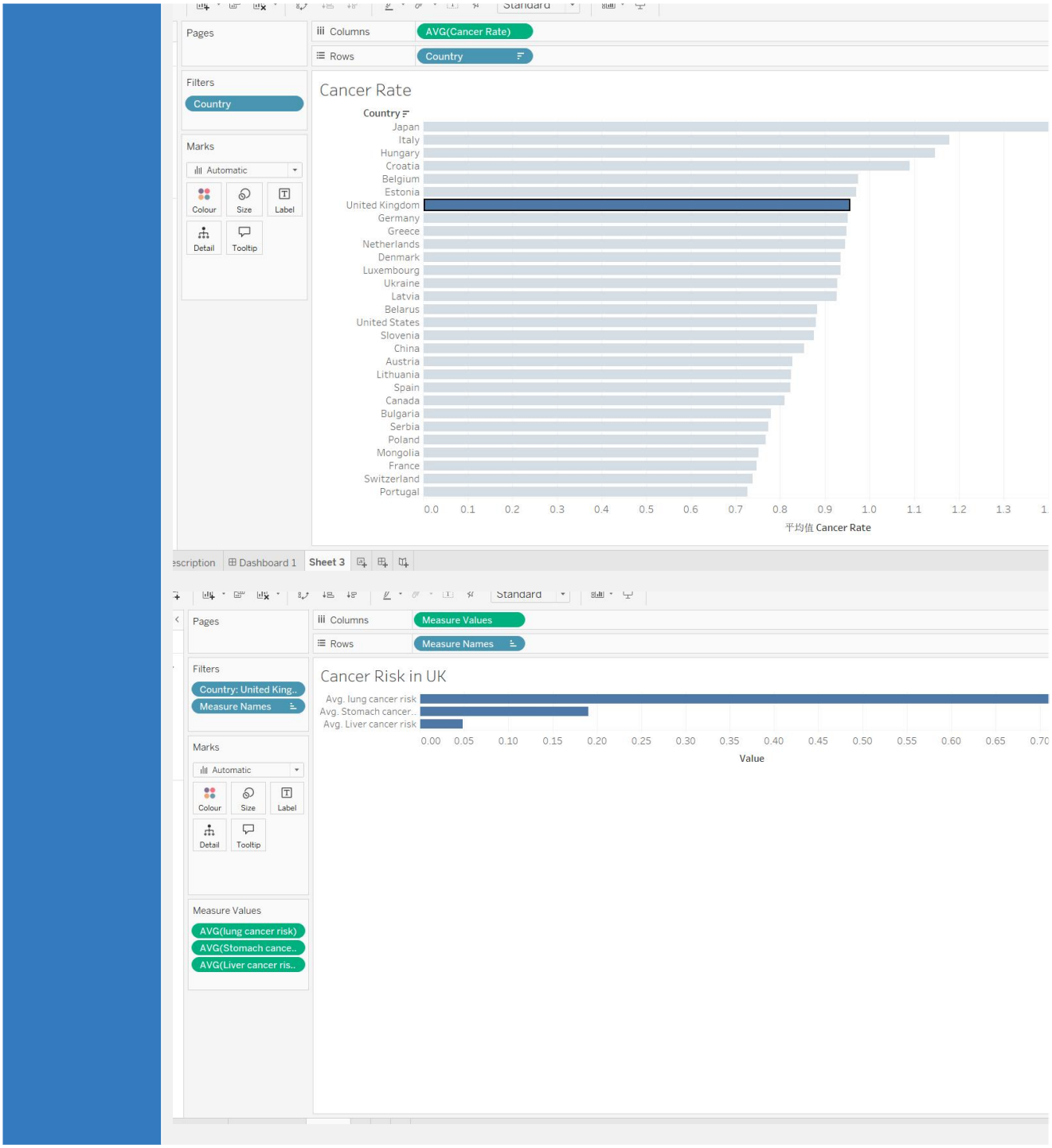
Using the Health, conduct an analysis to find trends and key information that could be used by an organisation for future support.

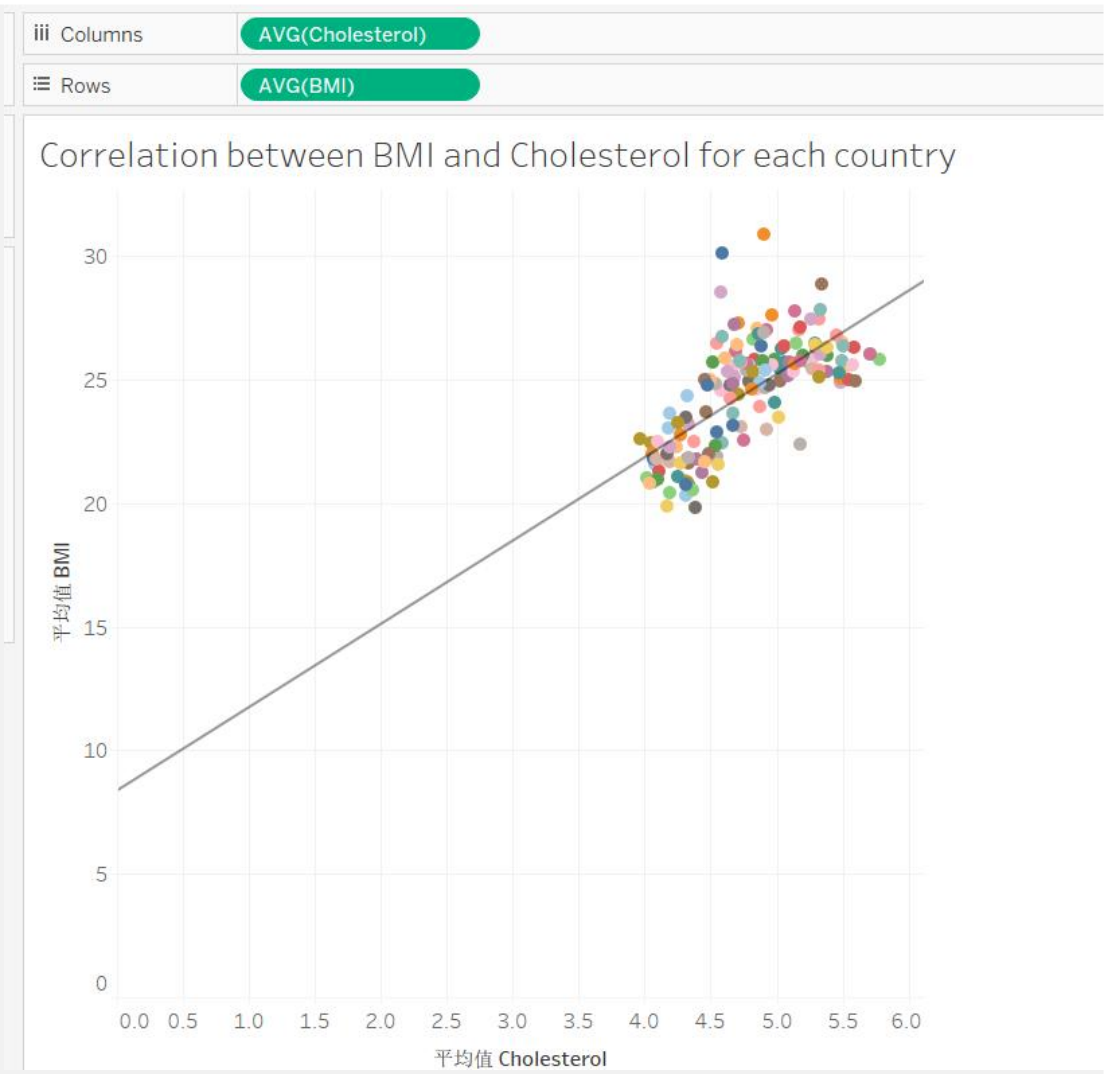
There is no set scope for the analysis, simply to find trends and document them below.

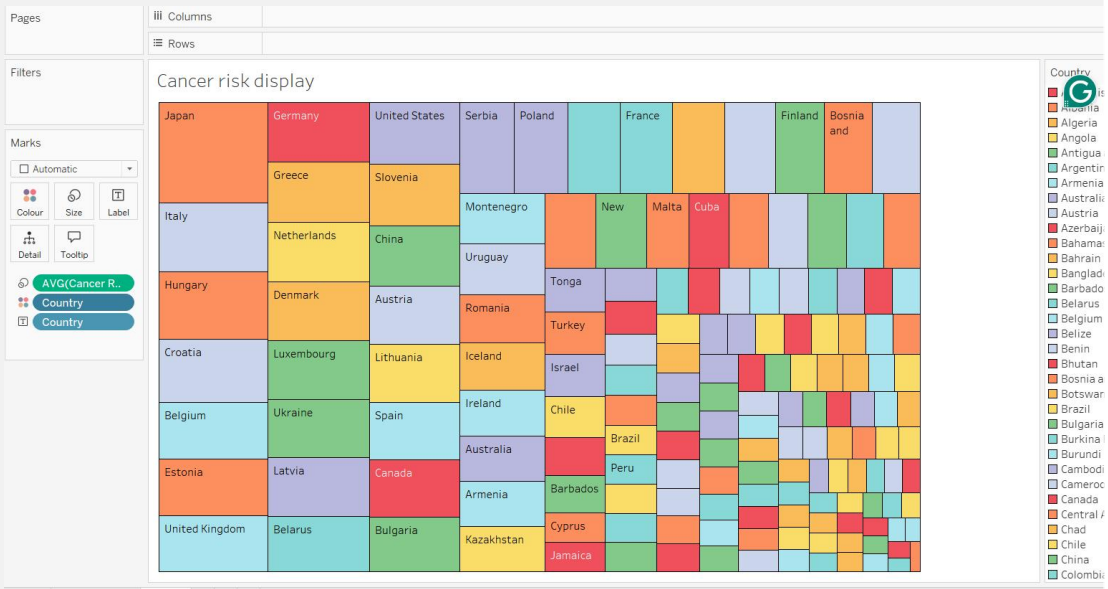
- Data can be lifesaving and is being used more within the NHS, reflect on how this data could support decision making for the NHS.

Paste your print screens here




Pages
Columns
AVG(Cancer Rate)
Rows
Country
Filters
Country
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Cancer Rate
Country
Japan
Italy
Hungary
Croatia
Belgium
Estonia
United Kingdom
Germany
Greece
Netherlands
Denmark
Luxembourg
Ukraine
Latvia
Belarus
United States
Slovenia
China
Austria
Lithuania
Spain
Canada
Bulgaria
Serbia
Poland
Mongolia
France
Switzerland
Portugal
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3
平均值 Cancer Rate
Dashboard 1
Sheet 3
Standard
Pages
Columns
Measure Values
Rows
Measure Names
Filters
Country: United King..
Measure Names
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Measure Values
AVG(lung cancer risk)
AVG(Stomach cance..
AVG(Liver cancer ris..
Cancer Risk in UK
Avg. lung cancer risk
Avg. Stomach cancer..
Avg. Liver cancer risk
0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.55 0.60 0.65 0.70
Value





What did 1. The average life expectancy, cholesterol and BMI for men in UK

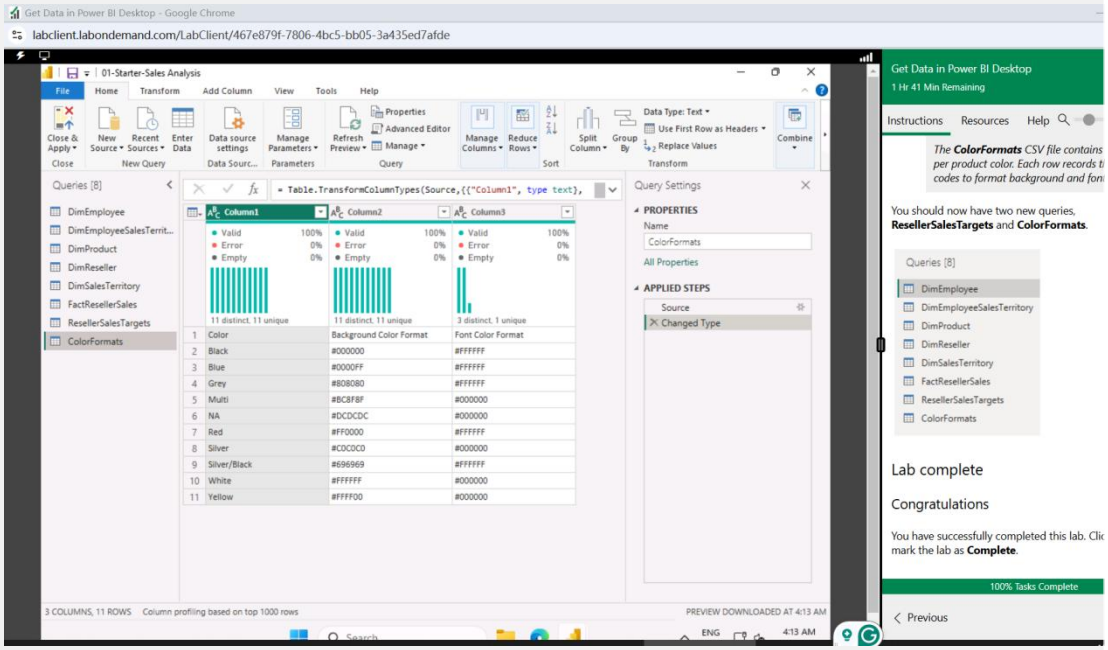
you find and any reflections on how the NHS could use this?	are all higher than women in UK, it might state that the living standard for men in UK are generally higher than the women in UK. Reflection: NHS shall pay more attention in women rights protection, especially in ensuring their basic living standards. 2. The comparison of the average blood pressures between top 10 life expectancy country and bot 10 life expectancy indicates that higher blood pressure may lead to lower life expectancy. Reflection: NHS shall advocate domestic residents to control the blood pressure to prevent from relevant diseases. 3. The average cancer rate of UK is about 0.95, which means almost every candidate has been tested at least one kind of all three kinds of cancers. Reflection: The lung caner risk in UK is the highest of 0.7, it might due to the triggers of lung diseases like smoking. 4. The average BMI and Cholesterol show a rough positive relationship, a linear model has been fitted to the model. But the R squared is only about 0.5, which means the correlation between these two factors is not highly strong. 5. This plot is the display of cancer risk for each country, where bigger square stands for higher cancer risk. The plot indicates that traditional developed countries' cancer risks are relatively higher than developing countries, this might because of the cancer detection is generally better in those developed countries compared to those developing countries.

Day 3: Task 1

Please complete Lab 1 'Get Data in Power Bi Desktop'. Once complete, paste a print screen below and in the collaboration board.

"Teaching is the best way to learn, so please listen out for support requests from the class and we'll work through the challenges together"

Paste your completed lab here

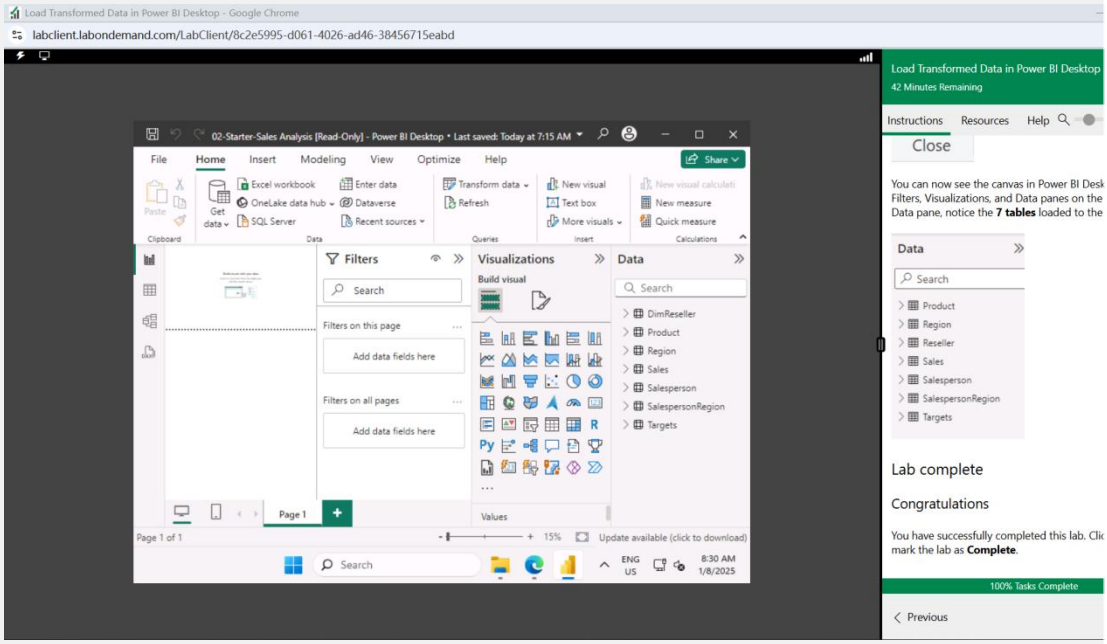


Day 3: Task 2

Please complete Lab 2 ‘Load Transformed Data in Power BI Desktop’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

Paste your completed lab here

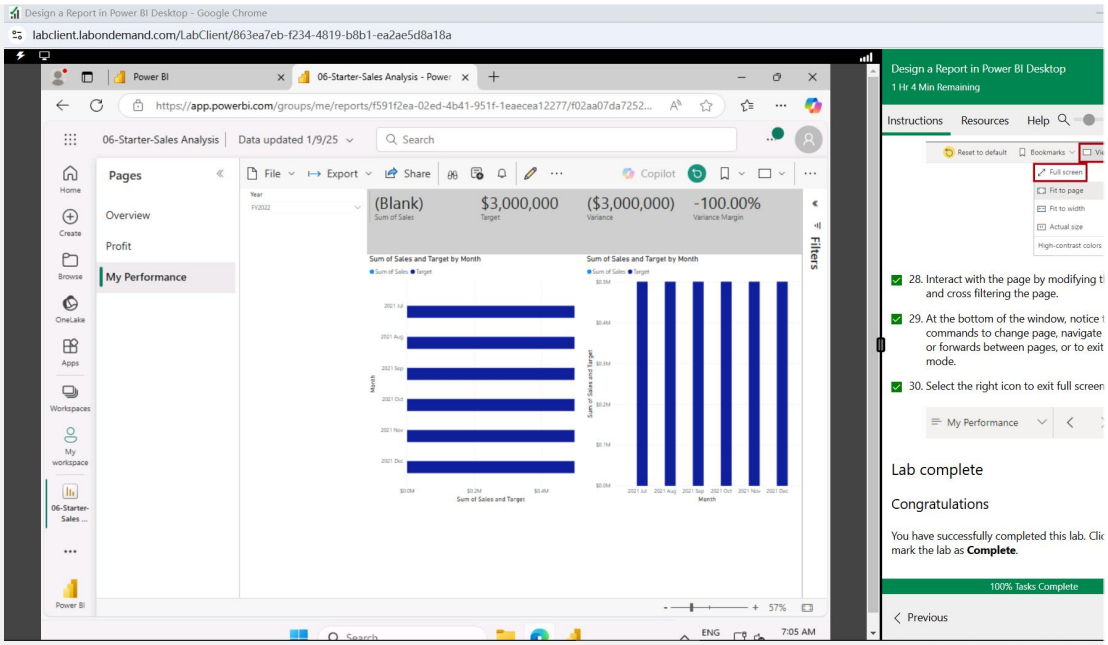


Day 4: Task 1

Please complete Lab 6 ‘Design a Report in Power BI Desktop’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

Paste your completed lab here

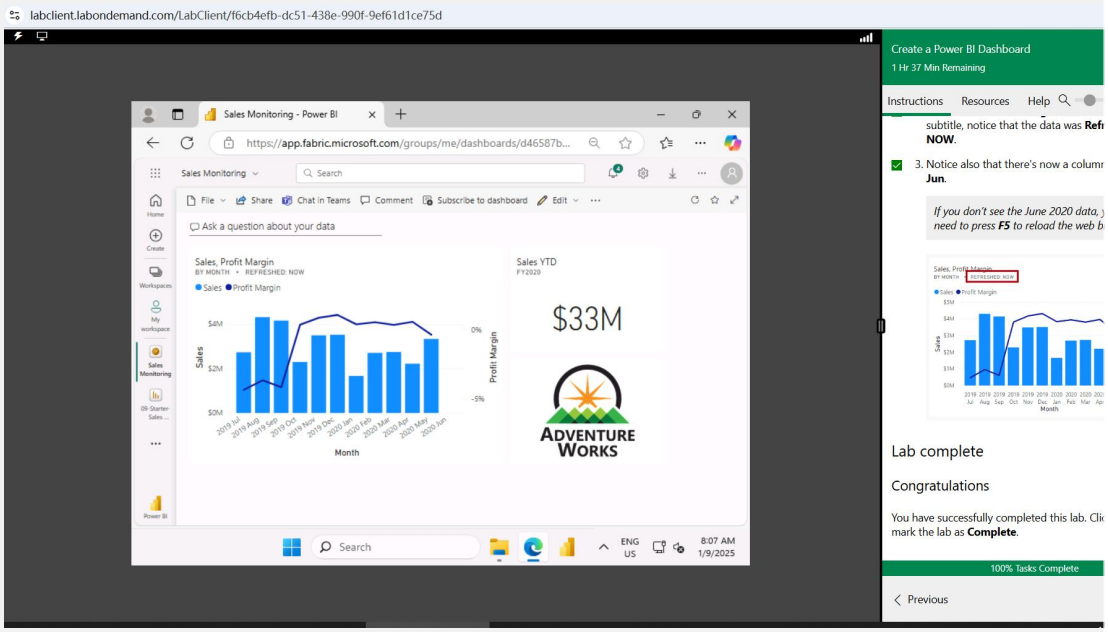


Day 4: Task 2

Please complete Lab 9 ‘Create a Power BI Dashboard’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

Paste your completed lab here



Course Notes

It is recommended to take notes from the course, use the space below to do so, or use the revision guide shared with the class.

We have included a range of additional links to further resources and information that you may find useful, these can be found within your revision guide.

END OF WORKBOOK

Please check through your work thoroughly before submitting and update the table of contents if required.

Please send your completed work booklet to your trainer.