Just IT

B2W group

Apprenticeships | Training | Recruitment

Data Technician

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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 Server – This version allows users to store data on their own server or cloud. Users have complete control over the server that Tableau runs on which increases data security. Users can also decide who should have access to their Tableau work and grant it. Tableau Online – This version is hosted in the cloud so Tableau maintains the system and hardware that Tableau runs on and is not in control of the user. This version is easy to set up and use and means organizations do not have to manage infrastructure or hardware. Additionally, this version can be used on mobile devices. Tableau Desktop – A desktop application that has menu's and interactive parameters to make user interaction easier.

Tableau Reader – This is a free desktop app that allows users to open and interact with tableau file types and dashboards. This does not allow users to edit or charts.

Tableau Mobile – A mobile app that allows users to connect to Tableau Online and Tableau Server. This allows users to read dashboards and interact with their site on their mobile device.

Tableau Prep – Allows users to clean, blend and manipulate data thought visuals. It allows users to automate data manipulation and manual tasks.

Tableau Public – This is available as a server version or a desktop version and is free. This provides tools for users to simplify data and streamline data collaboration. This version allows anyone to access Tableau and has a user-friendly interface. Tableau public is limited in the types of data source it can use and has no direct access to databases. All reports in Tableau public are made public with no security or protection which is not ideal for businesses. It does not allow you to save locally, you can only save in the cloud.

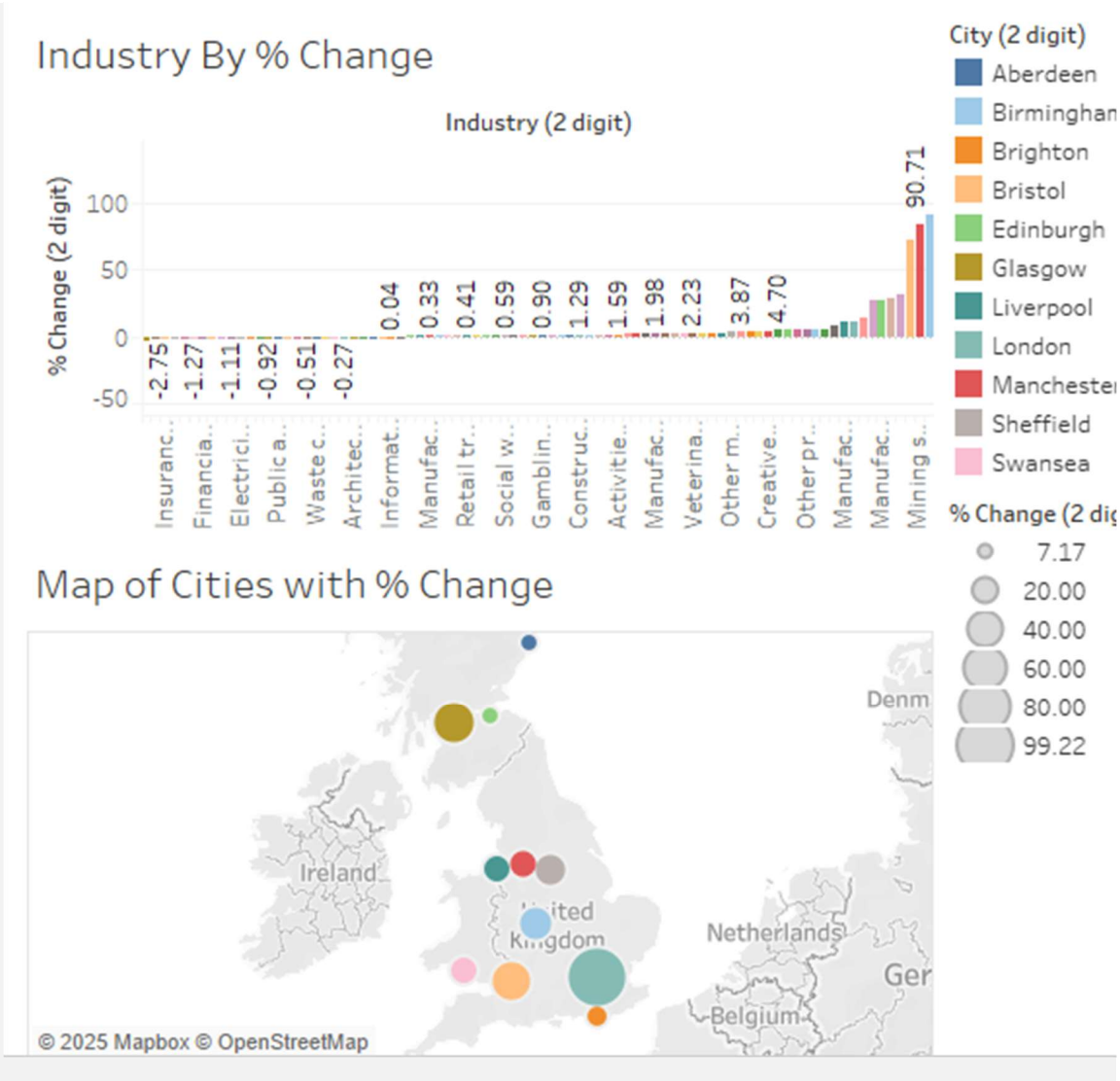
Sources - What are the Different Tableau Products? | Classes Near Me Blog

Tableau Public: Pros and Cons (Straight Talk Review)

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

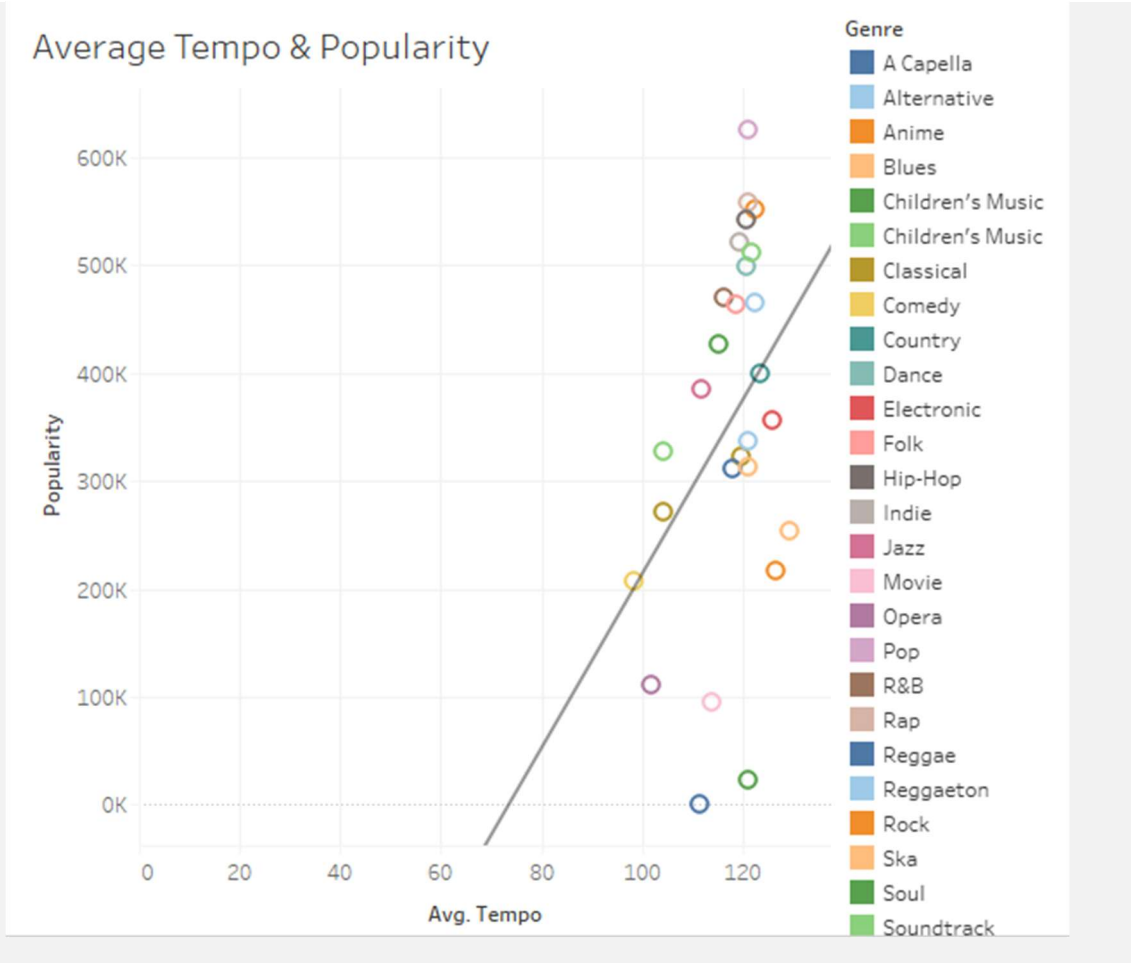


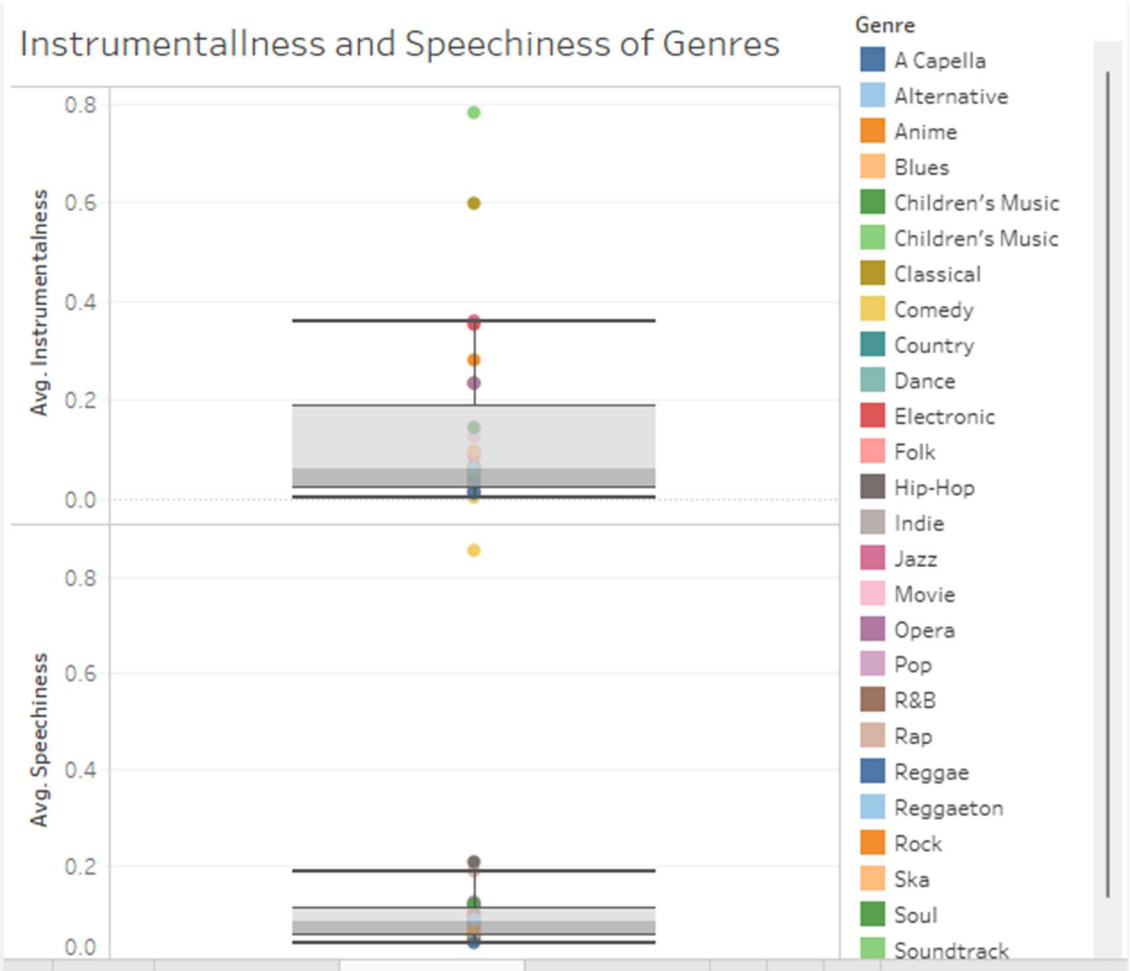
Day 2: Task 1

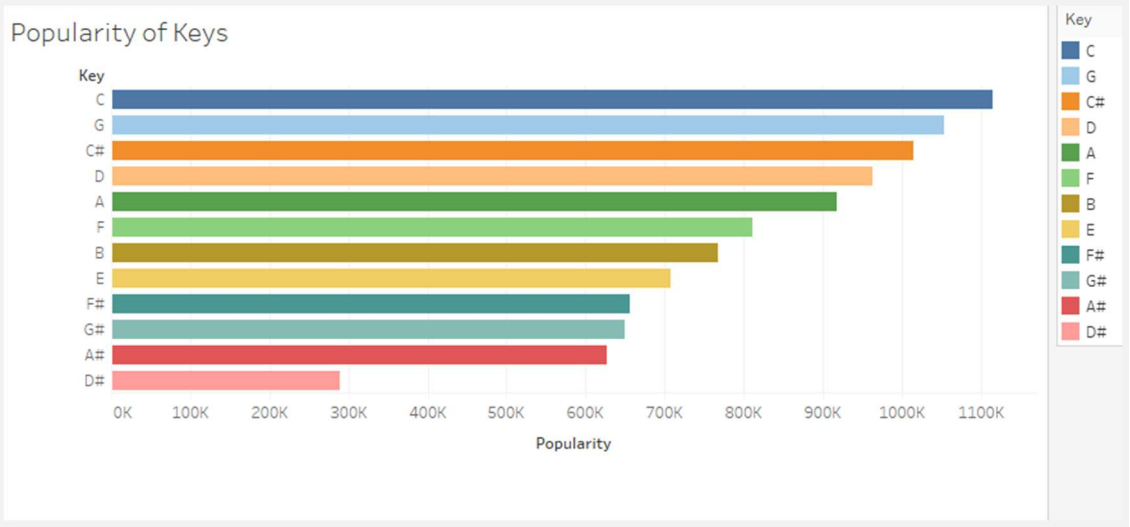
Using the Spotify data set, conduct an analysis to find trends and key information that could be used by an organisation for future projects.

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

Paste your print screens here







What did you find?	The Average Tempo and popularity graph shows a slight trend of songs with higher tempos being more popular, but the line is very skewed towards the high average tempo side since most genres have relatively similar average tempos. Average tempo also does not seem like a good measure of popularity since you have genres like pop and children's

music with similar average tempos (121.18 and 121.13 respectively) but have very different popularity (625,020 and 22,977 respectively).

The average instrumentalness boxplot shows that on average, music has a small amount of instrumentalness with the median being 0.0613. We have that Classical music and Soundtrack have so much more instrumentalness on average when compared with other genres that they are outliers. We also have that the genres Opera, Anime and Electronic have more average instrumentalness compared to other genres but are not outliers.

The average speechiness boxplot shows that on average, music tends to have a small amount of speechiness, with the median being 0.0836. Comedy music is a major outlier, so it has a significant amount more average speechiness when compared to other genres. Hip-hop is also an outlier showing that it also has significantly more average speechiness compared to other genres but still has a lot less average speechiness compared to comedy.

The popularity of keys shows that C is the most popular key, followed closely by G then C#. The keys then following a reasonable steady decrease in popularity until we get to the least popular key D# which has less than the half popularity of the key above it, A#.

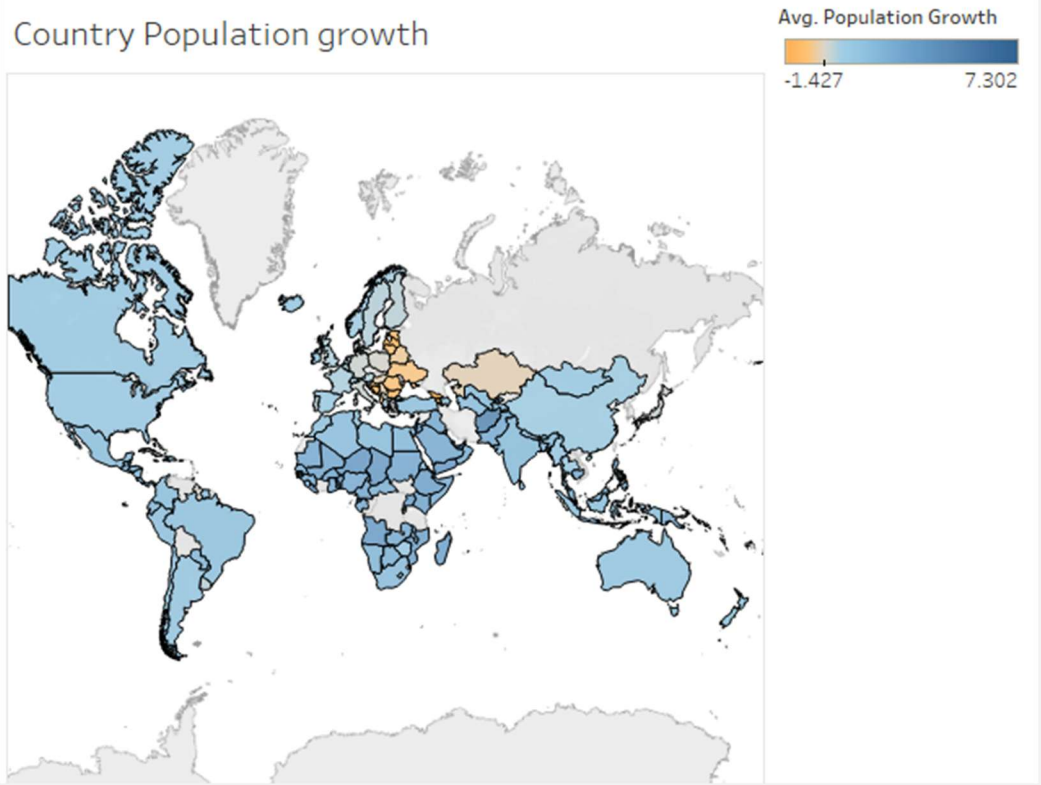
Day 2: Task 2

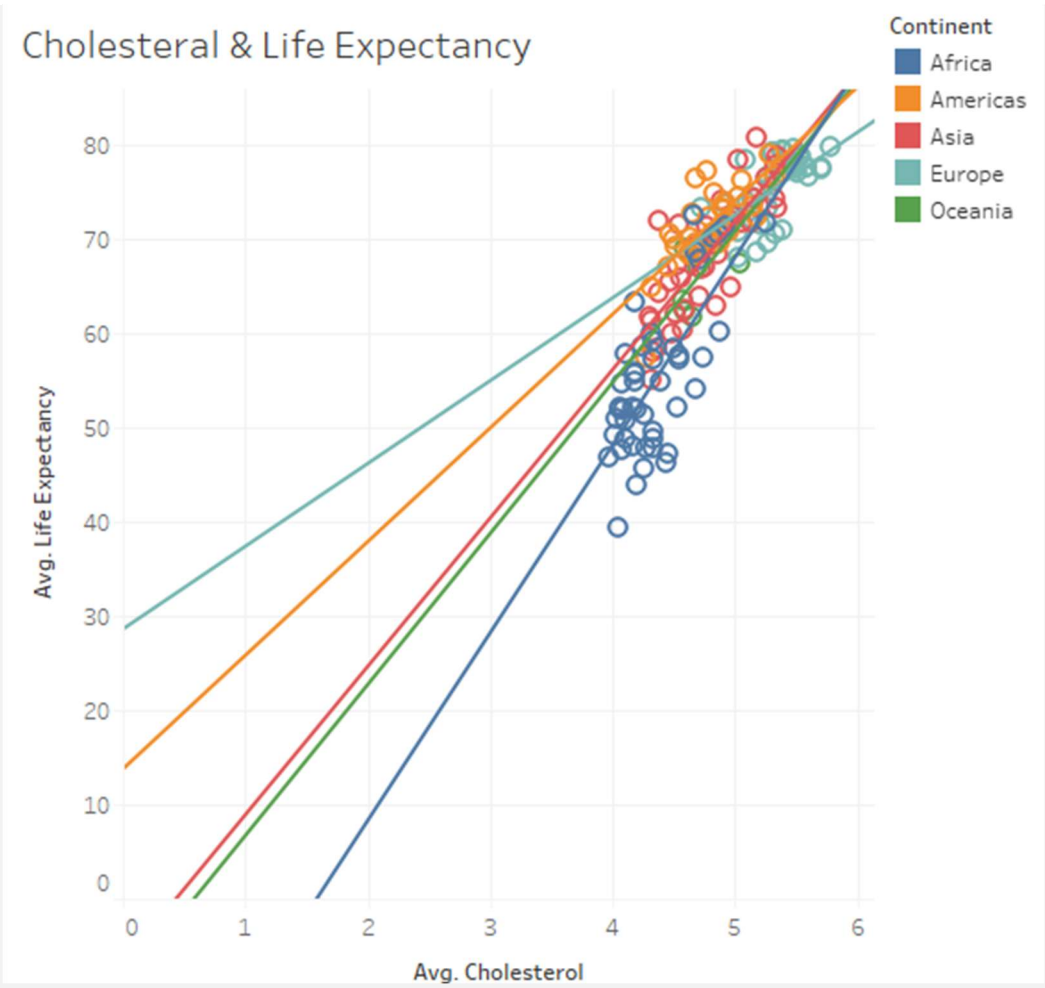
Using the Health, conduct an analysis to find trends and key information that could be used by an organisation for future support.

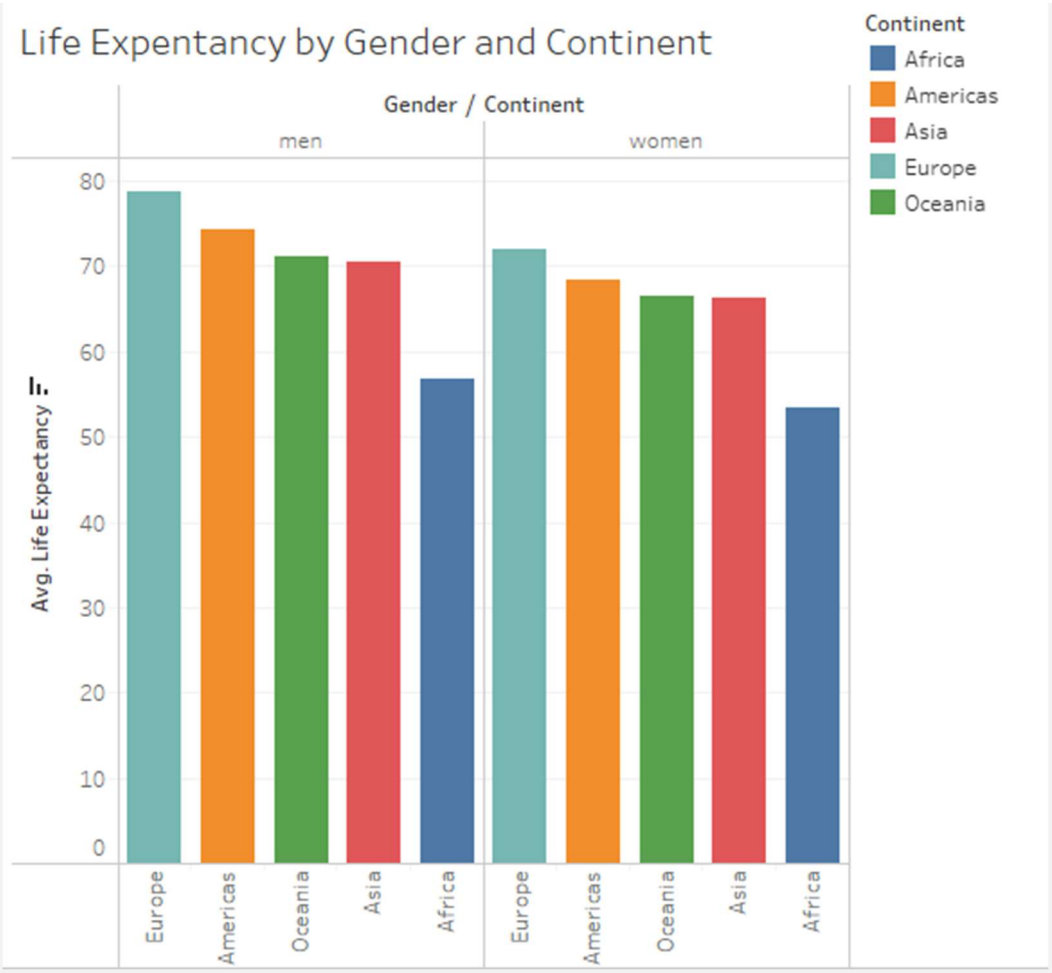
There is no set scope for the analysis, simply to find trends and document them below.

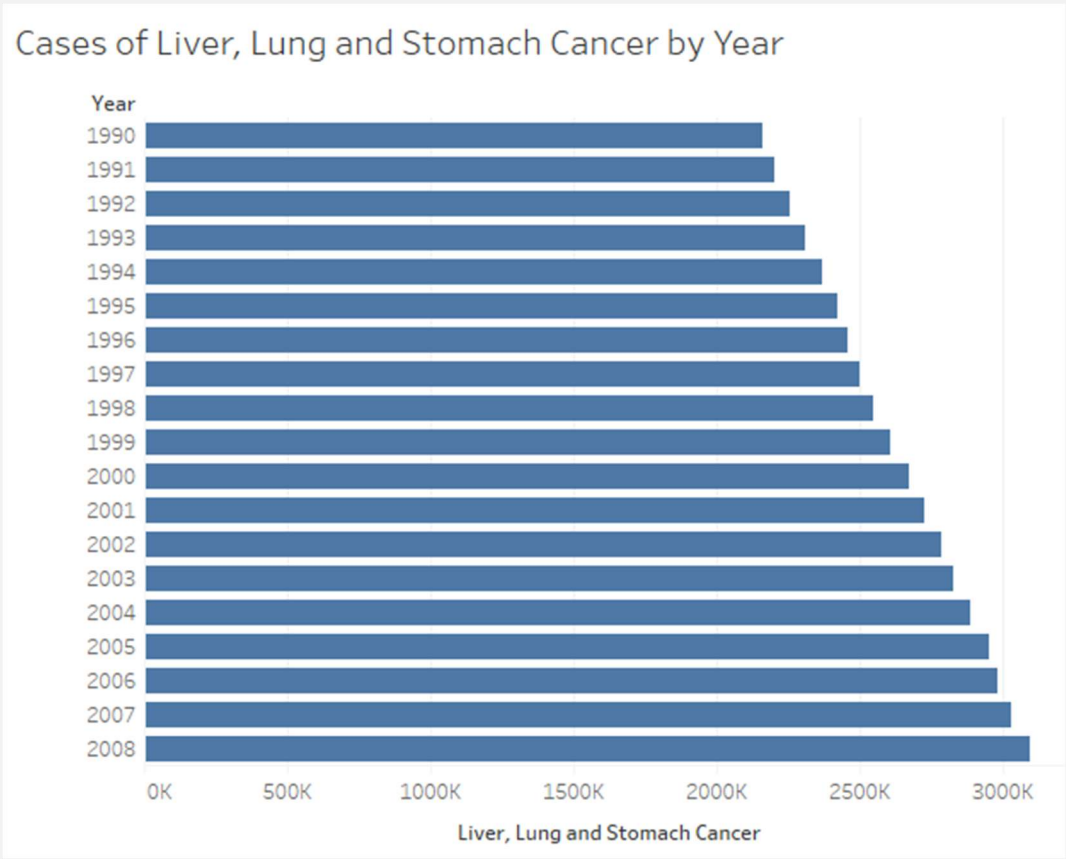
- Data can be lifesaving and is being used more within the NHS, reflect on how this data could support decision making for the NHS.

Paste your print screens here




Cholesteral & Life Expectancy
Continent
Africa
Americas
Asia
Europe
Oceania
Avg. Life Expectancy
0
10
20
30
40
50
60
70
80
Avg. Cholesterol
0
1
2
3
4
5
6


Life Expentancy by Gender and Continent
Continent
Africa
Americas
Asia
Europe
Oceania
Gender / Continent
men
women
Avg. Life Expectancy
80
70
60
50
40
30
20
10
0
Europe
Americas
Oceania
Asia
Africa
Europe
Americas
Oceania
Asia
Africa


Cases of Liver, Lung and Stomach Cancer by Year
Year
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
0K
500K
1000K
1500K
2000K
2500K
3000K
Liver, Lung and Stomach Cancer

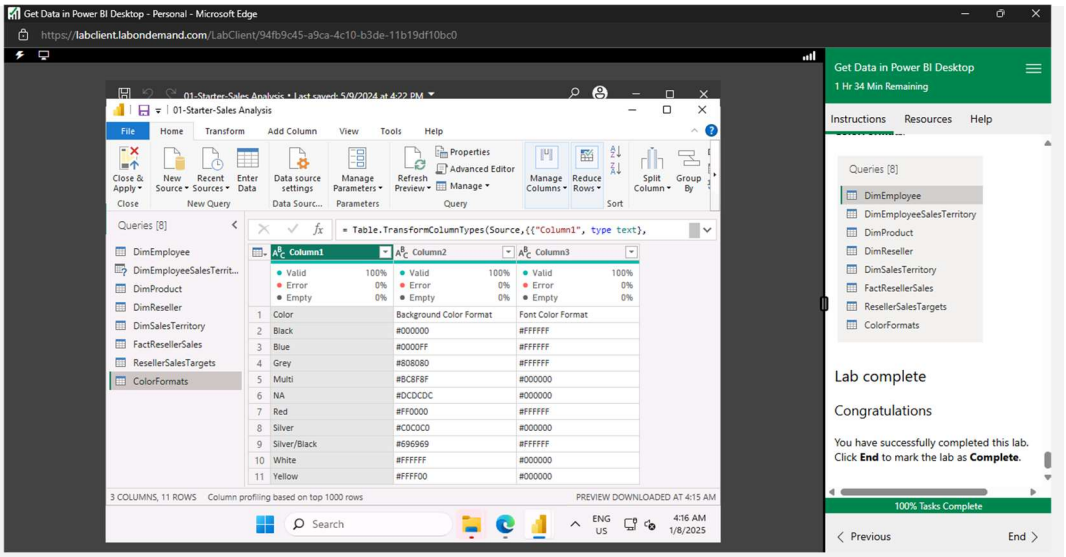
What did you find and any reflections on how the NHS could use this?	From the population growth by country Europe seems to have a low average population growth with most countries being below 1. This seems to get worse as we get to eastern Europe with countries being in the negative. The only exception in Europe to this seems to be Iceland with an average of 1.101. The biggest average population growth seems to be happening to countries in Africa and Asia such as UAE, Qatar, Niger and Jordan. The NHS can use the population growth to see how the UK's population growth compares to other countries and can consider whether there are health related issues affecting this. The Cholesterol & Life Expectancy shows that across all the continents, there is a general trend of countries with higher average cholesterol having higher average life expectancy. The NHS can use this by making recommendations to people involving their cholesterol intake and how it can affect their health outcomes. The Life expectancy by gender and continent shows that on average men have a higher life expectancy than women regardless of which continent they are in. It also shows that on average people have the highest life expectancy in Europe and have the lowest average life expectancy in Africa regardless of gender. This can be used by the NHS to see which groups of people are affected by lower life expectancy and what the NHS can do to improve it. It also gives an indication on how the UK's average life expectancy compares with the rest of the world although looking at average life expectancy by country would give a better indication of this. The Cases of Liver, Lung and Stomach Cancer by Year chart, shows that from 1990 to 2008 there has been a steady rise in cases of liver, lung and stomach cancer as the years progress. This shows the NHS that the number of cancer cases are rising which indicates that the NHS should look at why it is rising.

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.

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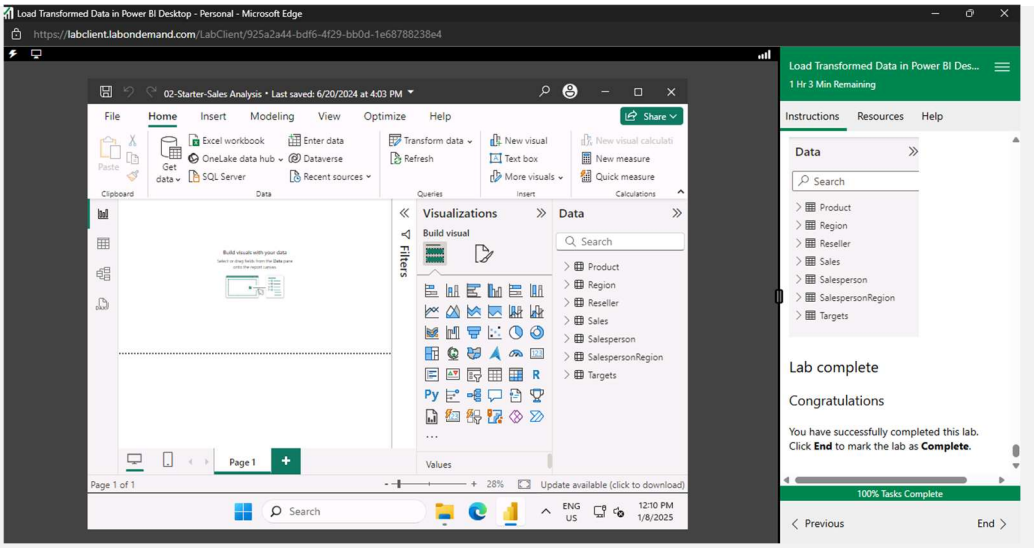
Paste your completed lab here



Day 4: Task 1

Please complete Lab 7 ‘Design a Report in Power BI Desktop’. Once complete, paste a print screen below and in the collaboration board.

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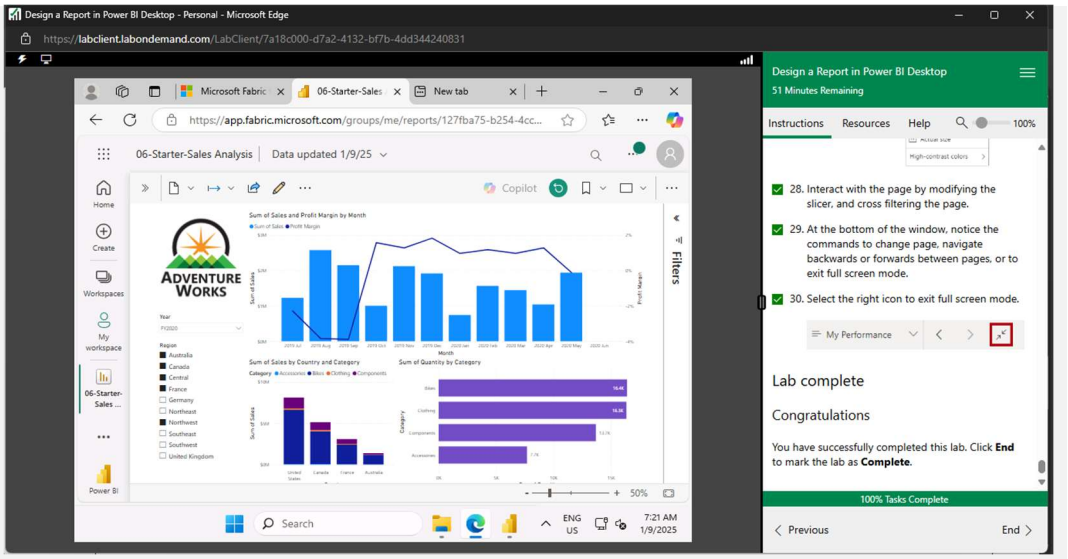
Paste your completed lab here



Day 4: Task 2

Please complete Lab 10 ‘Create a Power BI Dashboard’. Once complete, paste a print screen below and in the collaboration board.

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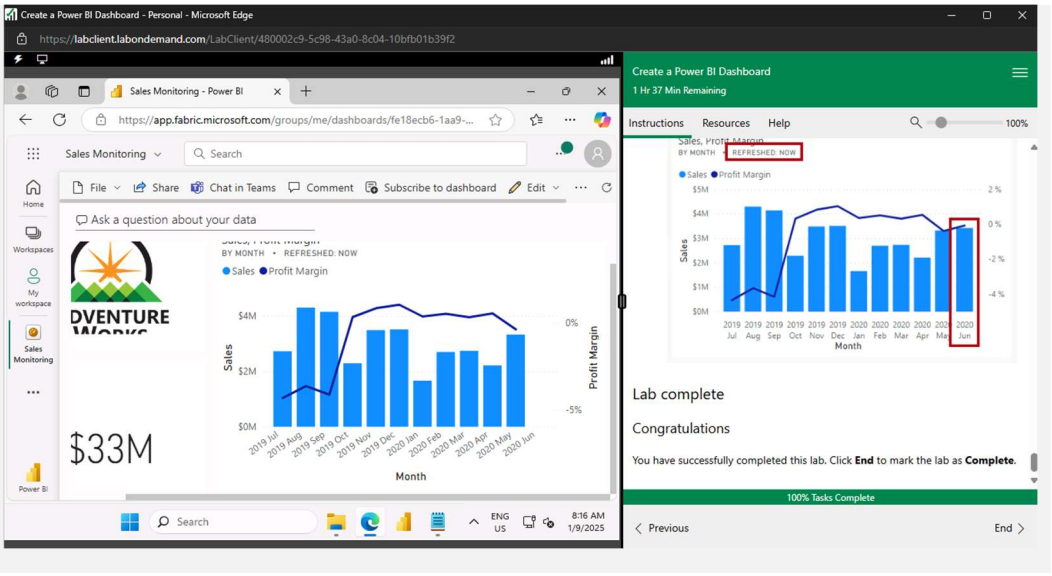
Paste your completed lab here



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.