

**Data Technician**

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| Course Date: 17/11/25 |
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# Day 1: Task 1

Please complete the below boxes on commons laws and regulations that must be followed when working with customers data, use the below bulleted list to support your answers.

* What is it
* Why is it important
* Provide a real-world example of how you can follow it
* How does it impact working with data
* What could happen if you breached it

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| Data Protection Act | The Data Protection Act is the backbone of Data laws in the UK. It ensures that businesses implement technical and administrative safeguards ensuring data is stored appropriately and within the right access of people.  It is important as it helps to protect individuals from identity theft and fraud disallowing data breaches. It also reduces the number of businesses being fined for inappropriate data storage and usage.  A real-world example of the data protection act is if a company wants to provide a 10% discount for signing up to their news-letter, they will have to disclose why they are collecting their data and what it would be used for.  It impacts working with data heavily as there are strict rules which need to be followed in order to handle the data without breaching any laws.  If there are any breaches it can lead to large fines for businesses or businesses being shut down due to improper handling of data. |
| GDPR | GDPR is a data protection law in the UK that sets rules on how organisations can collect data, store data and use the data. It applies to every organisation which collects any form of personal data.  It is important as it protects the rights to data privacy which gives more control to individuals over their personal information making it harder to be stolen or turned into fraudulent material.  Retailers must give consumers a privacy notice as to why their data is being collected, such as a supermarket collecting data on the most popular products in comparison to the slowest sellers.  The impact of working with data means there are restrictions to what can be performed with the data, therefore adding extra strain and potentially steps to the way the data is used.  Breaches to the GDPR can have companies face legal action and potential of closure. |
| Freedom of Information Act | The freedom of information act is a public right of access to recorded information held by public authorities in the UK.  It is important as it allows regular bodies to understand how public bodies such as governments spend tax payer money allowing transparency between both parties.  A scenario of this could be a regular person going into their local council building to request information of how much the government has spent on temporary housing over the past 5 years.  The impact of this means that anybody working in public sectors who are disclosing data must disclose it at the potential of a member of the public requesting it, therefore it will need to be thoroughly documented.  Breaches of this act include governments failing to respond to valid requests of data where authorities will step in and require the public sector to release that set of data if it is within valid reasons. |
| Computer Misuse Act | The computer misuse act is a law that makes unauthorised access to computer systems and data, damaging or tampering them a criminal offence.  It is extremely important as it allows the prosecution of hackers who may use data they have farmed for malicious intent. It helps to further protect data through national infrastructure.  An example of this act would be finding somebodies login details to their social media account on a piece of paper, log in in and then posting hateful messages from their profile.  The impact of the law when working with data is that anybody who has somewhat access to private data, they must only access things that they are authorised to otherwise they can face criminal charges.  Large fines and sometimes prison sentences are the outcome if you breach this act depending on the scale of data breach or cyber-attack you commit. |

# Day 2: Task 1

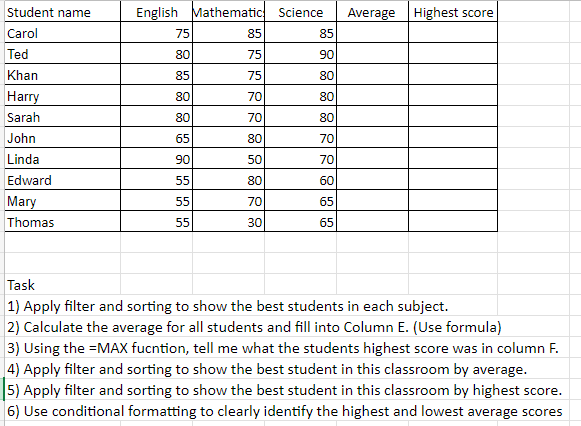
Please research and complete the following tasks within the retail-sales\_dataset.xlsx document, paste a print screen into the provided boxes below:

1. In the sheet ‘retail\_sales\_dataset’ add all available data between columns A –J into a ‘table’
2. Using the ‘sort’ function, sort ‘Age’ to ‘largest to smallest’
3. Using the ‘SUM’ function, show me the commission total in cell ‘L10’
4. Using the ‘AVERAGE’ function, show me the average commission in cell ‘L11’

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| Print screen 1 | A screenshot of a computer  AI-generated content may be incorrect. |
| Print screen 2 | A screenshot of a computer  AI-generated content may be incorrect. |
| Print screen 3 | A screenshot of a computer  AI-generated content may be incorrect. |
| Print screen 4 | A screenshot of a computer  AI-generated content may be incorrect. |

# Day 2: Task 2

Please research and complete the following tasks within the retail-sales\_dataset.xlsx document, paste print screens into the provided box below:



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| Print screen 1 | 1. A screenshot of a computer     AI-generated content may be incorrect. A screenshot of a computer     AI-generated content may be incorrect. A screenshot of a computer     AI-generated content may be incorrect.   2/4)A screenshot of a computer  AI-generated content may be incorrect.  3/5) A screenshot of a computer  AI-generated content may be incorrect. 6) |

# Day 2: Task 3

Using the skills developed today, have some fun with the data set you have imported. Paste your work below and enjoy!

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| Print screen 1 | A screenshot of a computer  AI-generated content may be incorrect. |
|  | MAX Function, AVERAGE FUNCTION, SUMIF Function and SUM Function for total revenue |
|  | A screenshot of a computer  AI-generated content may be incorrect.PIVOT TABLE |

# Day 3: Task 1

Please download the dataset ‘Day\_3\_Task\_1\_Bike\_Sales\_Pivot\_Lab.xlsx’ and the lab instructions.

Do not worry if you do not complete the lab, just working with data and playing with the pivot table will be good experience.

Please paste your final pivot table below and complete the reflection questions:

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| Print screen 1 | A screenshot of a computer  AI-generated content may be incorrect. |
| In which markets does Germany have customers? | A screenshot of a computer  AI-generated content may be incorrect. ADULTS |
| What country has sales in all markets? | A screenshot of a computer  AI-generated content may be incorrect.  Australia |
| What are the most profitable markets by country, age group, and gender? | A screenshot of a computer  AI-generated content may be incorrect.  Most profitable age is young adults  Most profitable country is Australia  Most profitable Gender is Female |
| Any other findings? |  |

# Day 3: Task 2

The dataset below tracks the sales performance of different products in various counties in England. Please paste the dataset into a blank Excel workbook. Your task is to:

* **Create a Pivot Table** to summarise the data by county and product.
* **Use the SWITCH function** to categorise products based on their sales volume.

#### **Dataset:**

|  |  |  |
| --- | --- | --- |
| **County** | **Product** | **Sales Volume** |
| Yorkshire | Laptops | 500 |
| Yorkshire | Smartphones | 200 |
| Cornwall | Laptops | 700 |
| Cornwall | Printers | 400 |
| Lancashire | Smartphones | 150 |
| Lancashire | Laptops | 600 |
| Essex | Printers | 800 |
| Essex | Smartphones | 300 |
| Durham | Laptops | 250 |
| Durham | Printers | 300 |
| Greater Manchester | Smartphones | 600 |
| Greater Manchester | Laptops | 400 |

#### **Step 1: Create a Pivot Table**

* Select the dataset (columns A to C).
* Insert a Pivot Table to summarise the data by **County** in the rows and **Products** in the columns. Use **Sales Volume** as the value to be summarised.

#### **Step 2: Use the SWITCH Function**

In a new column next to your data, use the SWITCH function to categorise products based on **Sales Volume** as follows:

* + For sales greater than 600: **"High"**
  + For sales between 300 and 600: **"Medium"**
  + For sales less than 300: **"Low"**

**SWITCH Function Example**:

=SWITCH(TRUE, C2 > 600, "High", C2 >= 300, "Medium", "Low")

* Apply this formula to each row, and check if the products are categorised correctly.

#### **Submission:**

* A completed Pivot Table summarising sales by county and product.
* A new column in the dataset categorising products by sales volume using the SWITCH function.
  + Please paste your completed work below

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| Print screen 1 | 1)A screenshot of a computer  AI-generated content may be incorrect.   1. A screenshot of a computer     AI-generated content may be incorrect. |

# Day 3: Task 3

Please download the dataset ‘Day\_3\_Task\_3\_Bike\_Sales\_Visualisations\_Lab.xlsx’ and the the lab instructions. Do not worry if you do not complete the lab, just working with data and playing with the charts will be good experience.

Please paste your results below:

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# Day 4: Task 1

You have been asked to deliver your analysis findings to the board of directors, with your analysis you have identified that customers are leaving your company at the 12-month point, this is typically when they receive their renewal price.

Conduct research and complete the below questions:

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| How would you prepare for the delivery? | Creating a structure of what you are going to say, when you are going to say it and how you will present the delivery. Come up with solutions to questions beforehand to save mental strain. Practice and rehearse the delivery of how you exactly want to say something. |
| What tools would you use for the delivery? | Tools that could be used would be Excel to perform pivot tables and categorically sort graphs.  PowerBI to visualise and analyse the data  PowerPoint to create a professional presentation or Canva |
| What is prospecting and why would you complete this before your delivery? | Prospecting can be referred to as the possibility of something happening in the future or the chance of future success. Similarly to forecasting this could be completed before as insights to show board members about the potential upside and downside to the next prospective year. |
| Tell me best practices for public speaking and providing updates to senior leaders | The best practice would be self-rehearsal or rehearsing your speech with someone to go over, practice and refine it. This will make speaking clearer and more confident, allowing for easier eye contact and also flowing into any questions asked. |
| What will you show the board in your delivery? | Key findings from initial analysis, descriptive statistics, visual summaries, graphs and visual forecasting, key insights based on data analysis, answers to the initial questions or hypothesis, recommendations |
| How will you articulate the changes that are needed? | You would state what clearly needs to be changed, why it matters commercially and what specific actions I would take you want approved in a friendly professional manner. |
| Provide a list of online resources and videos that will support your preparation for public speaking | <https://www.youtube.com/watch?v=WD1qypDgt1A>  <https://www.toastmasters.org/resources/public-speaking-tips>  <https://cloudassess.com/blog/public-speaking-courses/> |
| Evaluate tools that provide visualisation.  Tell me what they are.  Tell me what you would choose when delivering your presentation and why | Data visualisation tools convert raw data into charts, graphs, maps and dashboards to make it easier to understand, with popular examples including  Tableau, PowerBI and LOOKER  I would choose PowerBI as it is easy to use, have powerful data visualisation, its cost effective and has seamless integration with the Microsoft ecosystem like excel. |

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| **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:

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| **Additional Information** |

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.**