

**Data Technician**

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| Name: |
| Course Date: |
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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 | It is a UK law that controls how organizations, businesses, and the government use personal information, it is important as it protects all of our personal data that we may have, in the real world employers would not be allowed to release information to a customer about an employee as that is a breach of data protection, working with data one would have to get permission of people if they were conducting a research and said information was needed to therefore be able to use it, if breached there would be enforcement by the ICO and could have a fine or warning or even reprimands |
| GDPR | It is a European Union law that sets guidelines for how personal data can be collected and processed, Its important because it protects personal data from individuals in and outside the EU, in the real world it would be most seen when shopping online and the store would ask for more personal content whilst clearly stating what information will be used and why its needed whilst also providing the option to withdraw the content at any time when submitting an email, when it comes working with data this GDPR means we could only collect data if there has been consent. When breached it could be when an electronic device is lost or stolen or a ransomware attack encrypts data |
| Freedom of Information Act | It is when anyone has a right to find out what data is held in their name within an organisation its important as it means we can access data under our name at any given point and the authorities have to respond within 20 days, In the real world it could be a concerned member of the public asking about the details about the number of complaints filed against a local police station when working with data that information should be kept private until said otherwise, if someone releases raw data that includes personally identifiable information that is a breach therefore the consequences of this can be up to 5 years in jail or major fines |
| Computer Misuse Act | It is a UK law that protects citizens' devices and data by making it illegal to access a computer without permission or make changes to a computers file without permission it is important as is protects personal data held by organisations from unauthorised access and modification if someone hacks you computer that is where CMA would come into this, therefore it means that if an employ were to handle someone’s sensitive data they would have to do so with proper permissions and security practices to avoid legal repercussions |

# 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 – H** into a ‘table’
2. Using the ‘filter’ function, filter ‘Age’ to ‘largest to smallest’
3. Using the ‘SUM’ function, show me the commission total in cell ‘**P10’**
4. Using the ‘AVERAGE’ function, show me the average commission in cell **‘P11’**

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| Print screen 1 | I do not understand this question as all the data is already in the table presented |
| Print screen 2 |  |
| Print screen 3 |  |
| Print screen 4 |  |

# 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:



|  |  |
| --- | --- |
| Print screen 1 |  |

# 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 |  |

# Day 3: Task 1

Please download the dataset ‘Day\_3\_Task\_1\_Bike\_Sales\_Pivot\_Lab.xlsx’ from [here](https://justit831-my.sharepoint.com/:x:/g/personal/danpe_justit_co_uk/Eb73L6LixCJHtafDJ4AOh-ABR9CVF0n9sdEgB4foSh261g?e=jh493A).

The lab instructions can be found [here](https://justit831-my.sharepoint.com/:b:/g/personal/danpe_justit_co_uk/EVySAtWQiEVDmrtCufrqTgwBuLVxX6mEKYqEAe0Mgl6b9Q?e=i05yOa). 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 |  |
| In which markets does Germany have customers? | Adults 35-64, Male and Female but more predominant in Female sales |
| What country has sales in all markets? | The country in which has sales in all markets is the United Kingdom. |
| What are the most profitable markets by country, age group, and gender? | The markets in which are most profitable in age group is the ages 35-64, for the most profitable country It is the United States and finally the market most profitable by gender is Female |
| Any other findings? | It seems that in every country female sales are more and that the united states and Australia have the most sales. |

# 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 |  |

# Day 3: Task 3

Please download the dataset ‘Day\_3\_Task\_3\_Bike\_Sales\_Visualisations\_Lab.xlsx’ from [here](https://justit831-my.sharepoint.com/:x:/g/personal/danpe_justit_co_uk/ESeJLtyZhYxIpZXluVywvvkBxgx2EtpPUzmxLCzQBGTKNQ?e=naSu4B).

The lab instructions can be found [here.](https://justit831-my.sharepoint.com/:b:/g/personal/danpe_justit_co_uk/Ec1IWsNPl_ZMuaSbNcaLyVcByy3JcZaQgoG1FeFwO9neRQ?e=6lsJG1) 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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| Print screen 1 |  |

# Day 4: Task 1

You have been asked to deliver your analysis findings to the board of directors, within 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? |  |
| What tools would you use for the delivery? |  |
| What is prospecting and why would you complete this before your delivery? |  |
| Tell me best practices for public speaking and providing updates to senior leaders |  |
| What will you show the board in your delivery? |  |
| How will you articulate the changes that are needed? |  |
| Provide a list of online resources and videos that will support your preparation for public speaking |  |
| Evaluate tools that provide visualisation.  Tell me what they are.  Tell me what you would choose when delivering your presentation and why |  |

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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.**