

**Data Technician**

|  |
| --- |
|  |

|  |
| --- |
| Name: Alaa Mostafa |
| Course Date: 16/12/24 |
|  |

**Table of contents**

[Day 1: Task 1 2](#_Toc77637984)

[Day 2: Task 1 2](#_Toc1634060488)

[Day 2: Task 2 3](#_Toc152114794)

[Day 2: Task 3 4](#_Toc257844391)

[Day 3: Task 1 4](#_Toc1014152162)

[Day 3: Task 2 5](#_Toc1498274088)

[Dataset: 5](#_Toc1056274673)

[Step 1: Create a Pivot Table 5](#_Toc782776295)

[Step 2: Use the SWITCH Function 5](#_Toc365195726)

[Submission: 6](#_Toc485671904)

[Day 3: Task 3 6](#_Toc1856180793)

[Day 4: Task 1 7](#_Toc381189142)

[Course Notes 9](#_Toc1368242635)

[Additional Information 10](#_Toc305684719)

# 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

|  |  |
| --- | --- |
| Data Protection Act | The **Data Protection Act (DPA)** is a law that regulates how personal data is collected, stored, and used to protect individuals' privacy and rights. It ensures organizations handle data lawfully, securely, and transparently while giving individuals control over their personal information. |
| GDPR | The **General Data Protection Regulation (GDPR)** is a European Union law that protects personal data by setting strict rules on how organizations collect, process, store, and share individuals' information, ensuring privacy and security. |
| Freedom of Information Act | The **Freedom of Information Act (FOIA)** gives the public the right to access information held by government organizations, promoting transparency and accountability. |
| Computer Misuse Act | The Computer Misuse Act 1990 is a UK law that makes it illegal to access or alter computer systems and data without authorization, including hacking, spreading malware, and unauthorized access to networks. |

# 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 ‘filter’ function, filter ‘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’

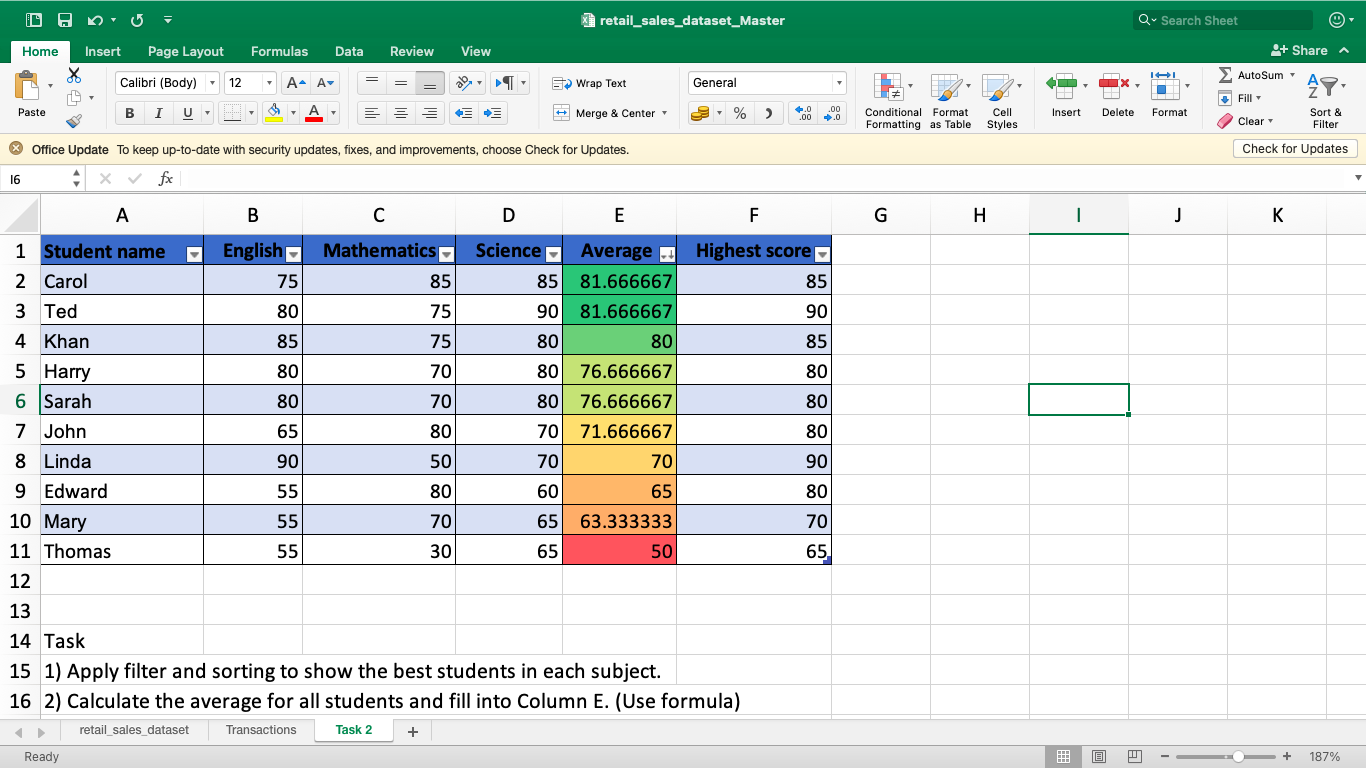
|  |  |
| --- | --- |
| Print screen 1 |  |
| Print screen 2 |  |
| Print screen 3 |  |
| Print screen 4 |  |

# 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!

|  |  |
| --- | --- |
| 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:

|  |  |
| --- | --- |
| Print screen 1 |  |
| In which markets does Germany have customers? |  |
| What country has sales in all markets? |  |
| What are the most profitable markets by country, age group, and gender? |  |
| 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

|  |  |
| --- | --- |
| 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:

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

# 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:

|  |  |
| --- | --- |
| 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 |  |

|  |
| --- |
| **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:

|  |
| --- |
|  |

|  |
| --- |
| **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.**