Just IT

B2W group

Apprenticeships | Training | Recruitment

Data Technician

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Course Date: 16/12/24

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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

Data Protection Act	Data protection act is a law that governs how data is collected used and stored, it is important as it protects people personal information which companies may hold about them. A real world example of this would be simple data such as address, name and

	billing details on your weekly shopping website, when working with data you should ensure it handles securely whether it is being processed or shared with others within the company, if the proper procedures are not followed it could result in loss of custom, business fines and even prison time for more serious offences.
GDPR	This is a European law that sets the rules for processing data received within the EU, it gives rights and protection to people's data and holds companies responsible for any data they may store on people. In the real world we must ensure we give the user the option to opt out of data sharing and give them a clear outline what their data can and may be used for. Again, if this is breached whether internally or externally you could lose trust with customers along with big fines for the business and those responsible.
Freedom of Information Act	This refers to a law that allows people to have access to their own data if and when they request it, this allowed the consumer to request data held by the business about them to ensure it is correct an/or use for research. For example you can request a spending report from a public body to ensure they are using the money correctly and as they say they are, this will be collated and given to the person requesting within 28 days or the business could face investigations as to why this was not provided in the correct time frame.
Computer Misuse Act	This is a law that protects business' from unwanted personel from accessing data without permission, it is important as it plays a vital part in keeping our data safe from cyber-attacks and other forms of hacking a business may receive, an example of this would be only using your log in to access the work computer even if you know your colleagues log in as this would breach the misuse act, if you are found to be breaching this then you could be fined or fired from your position along with giving the business a bad look.

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'

Print screen 1

Transaction ID	Date	Customer ID	Gender	Age	Product Category	Quantity	Price per Unit
22	10/15/2023	CUST022	Male	18	Clothing	2	50
37	5/23/2023	CUST037	Female	18	Beauty	3	25
58	11/13/2023	CUST058	Male	18	Clothing	4	300
62	12/27/2023	CUST062	Male	18	Beauty	2	50
74	11/22/2023	CUST074	Female	18	Beauty	4	500
148	5/9/2023	CUST148	Male	18	Clothing	2	30
169	11/17/2023	CUST169	Male	18	Beauty	3	500
283	5/8/2023	CUST283	Female	18	Electronics	1	500
305	5/16/2023	CUST305	Female	18	Beauty	1	30
326	9/15/2023	CUST326	Female	18	Clothing	3	25
461	3/25/2023	CUST461	Female	18	Beauty	2	500
469	5/8/2023	CUST469	Male	18	Beauty	3	25
514	3/1/2023	CUST514	Female	18	Electronics	1	300
530	2/5/2023	CUST530	Female	18	Electronics	4	30
538	9/17/2023	CUST538	Male	18	Clothing	3	50
556	6/4/2023	CUST556	Female	18	Electronics	1	50
595	11/9/2023	CUST595	Female	18	Clothing	4	500
679	1/11/2023	CUST679	Female	18	Beauty	3	30
714	2/12/2023	CUST714	Female	18	Clothing	1	500
837	7/1/2023	CUST837	Male	18	Beauty	3	30
847	4/8/2023	CUST847	Female	18	Electronics	4	300
16	2/17/2023	CUST016	Male	19	Clothing	3	500
86	11/8/2023	CUST086	Male	19	Beauty	3	30
117	3/15/2023	CUST117	Male	19	Electronics	2	500
181	11/3/2023	CUST181	Male	19	Electronics	4	300
257	2/19/2023	CUST257	Male	19	Beauty	4	500
266	12/1/2023	CUST266	Female	19	Electronics	2	30
300	1/31/2023	CUST300	Female	19	Electronics	4	50
303	1/2/2023	CUST303	Male	19	Electronics	3	30
364	8/23/2023	CUST364	Female	19	Beauty	1	500
391	1/5/2023	CUST391	Male	19	Beauty	2	25
412	9/16/2023	CUST412	Female	19	Electronics	4	500
484	1/13/2023	CUST484	Female	19	Clothing	4	300
533	11/16/2023	CUST533	Male	19	Electronics	3	500
594	9/1/2023	CUST594	Female	19	Electronics	2	300
601	4/10/2023	CUST601	Male	19	Clothing	1	30
628	11/1/2023	CUST628	Female	19	Beauty	4	50
677	10/27/2023	CUST677	Female	19	Beauty	3	500
709	7/21/2023	CUST709	Female	19	Electronics	2	500
812	11/12/2023	CUST812	Male	19	Electronics	3	25
979	1/2/2023	CUST979	Female	19	Beauty	1	25
985	5/30/2023	CUST985	Female	19	Electronics	2	25
46	6/26/2023	CUST046	Female	20	Electronics	4	300
72	5/23/2023	CUST072	Female	20	Electronics	4	500
133	2/16/2023	CUST133	Male	20	Electronics	3	300
135	2/26/2023	CUST135	Male	20	Clothing	2	25
186	7/5/2023	CUST186	Male	20	Clothing	4	50
214	12/10/2023	CUST214	Male	20	Beauty	2	30
249	10/20/2023	CUST249	Male	20	Clothing	1	50
292	2/17/2023	CUST292	Male	20	Beauty	4	300
371	2/21/2023	CUST371	Female	20	Beauty	1	25

Print screen 2

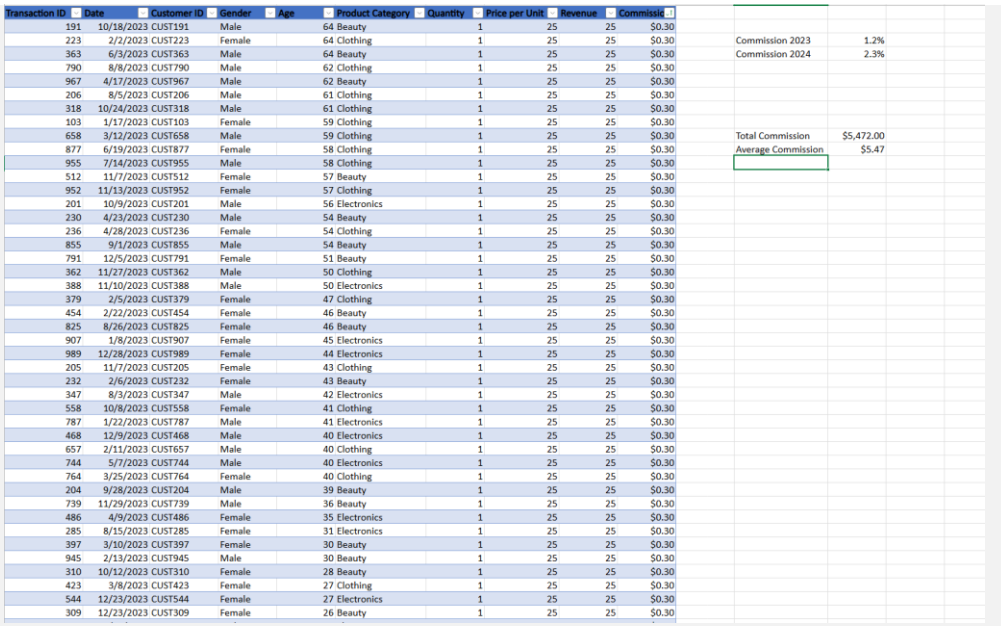
Transaction ID	Date	Customer ID	Gender	Age	Product Category	Quantity	Price per Unit
14	1/17/2023	CUST014	Male	64	Clothing	4	30
25	12/26/2023	CUST025	Female	64	Beauty	1	50
80	12/10/2023	CUST080	Female	64	Clothing	2	30
122	10/3/2023	CUST122	Male	64	Electronics	4	30
161	3/22/2023	CUST161	Male	64	Beauty	2	500
163	1/2/2023	CUST163	Female	64	Clothing	3	50
173	11/8/2023	CUST173	Male	64	Electronics	4	30
187	6/7/2023	CUST187	Female	64	Clothing	2	50
191	10/18/2023	CUST191	Male	64	Beauty	1	25
218	9/22/2023	CUST218	Male	64	Beauty	3	30
220	3/3/2023	CUST220	Male	64	Beauty	1	500
223	2/2/2023	CUST223	Female	64	Clothing	1	25
282	8/25/2023	CUST282	Female	64	Electronics	4	50
363	6/3/2023	CUST363	Male	64	Beauty	1	25
376	5/16/2023	CUST376	Female	64	Beauty	1	30
399	3/1/2023	CUST399	Female	64	Beauty	2	30
408	4/15/2023	CUST408	Female	64	Beauty	1	500
429	12/28/2023	CUST429	Male	64	Electronics	2	25
440	10/26/2023	CUST440	Male	64	Clothing	2	300
473	2/25/2023	CUST473	Male	64	Beauty	1	50
532	6/19/2023	CUST532	Female	64	Clothing	4	30
561	5/27/2023	CUST561	Female	64	Clothing	4	500
566	12/2/2023	CUST566	Female	64	Clothing	1	30
596	2/7/2023	CUST596	Female	64	Electronics	1	300
692	9/7/2023	CUST692	Female	64	Clothing	2	50
698	7/19/2023	CUST698	Female	64	Electronics	1	300
735	10/4/2023	CUST735	Female	64	Clothing	4	500
758	5/12/2023	CUST758	Male	64	Clothing	4	25
830	6/22/2023	CUST830	Female	64	Clothing	3	50
882	6/6/2023	CUST882	Female	64	Electronics	2	25
897	9/26/2023	CUST897	Female	64	Electronics	2	50
9	12/13/2023	CUST009	Male	63	Electronics	2	300
57	11/18/2023	CUST057	Female	63	Beauty	1	30
153	12/16/2023	CUST153	Male	63	Electronics	2	500
189	1/30/2023	CUST189	Male	63	Beauty	1	50
431	10/15/2023	CUST431	Male	63	Electronics	4	300
462	4/1/2023	CUST462	Male	63	Electronics	4	300
466	6/20/2023	CUST466	Male	63	Electronics	4	25
547	3/7/2023	CUST547	Male	63	Clothing	4	500
574	8/31/2023	CUST574	Female	63	Electronics	2	25
620	5/8/2023	CUST620	Male	63	Electronics	3	25
635	8/17/2023	CUST635	Female	63	Electronics	3	300
676	7/19/2023	CUST676	Male	63	Electronics	3	500
824	5/5/2023	CUST824	Male	63	Clothing	4	30
848	2/13/2023	CUST848	Female	63	Clothing	3	25
860	1/9/2023	CUST860	Male	63	Clothing	4	50
872	10/11/2023	CUST872	Female	63	Beauty	3	25
988	5/28/2023	CUST988	Female	63	Clothing	3	25
19	9/16/2023	CUST019	Female	62	Clothing	2	25
59	7/5/2023	CUST059	Male	62	Clothing	1	50
157	6/24/2023	CUST157	Male	62	Electronics	4	500
182	6/15/2023	CUST182	Male	62	Beauty	4	30

Print screen 3

Transaction ID	Date	Customer ID	Gender	Age	Product Category	Quantity	Price per Unit	Revenue	Commissio
191	10/18/2023	CUST191	Male	64	Beauty	1	25	25	$0.30
223	2/2/2023	CUST223	Female	64	Clothing	1	25	25	$0.30
363	6/3/2023	CUST363	Male	64	Beauty	1	25	25	$0.30
790	8/8/2023	CUST790	Male	62	Clothing	1	25	25	$0.30
967	4/17/2023	CUST967	Male	62	Beauty	1	25	25	$0.30
206	8/5/2023	CUST206	Male	61	Clothing	1	25	25	$0.30
318	10/24/2023	CUST318	Male	61	Clothing	1	25	25	$0.30
103	1/17/2023	CUST103	Female	59	Clothing	1	25	25	$0.30
658	3/12/2023	CUST658	Male	59	Clothing	1	25	25	$0.30
877	6/19/2023	CUST877	Female	58	Clothing	1	25	25	$0.30
955	7/14/2023	CUST955	Male	58	Clothing	1	25	25	$0.30
512	11/7/2023	CUST512	Female	57	Beauty	1	25	25	$0.30
952	11/13/2023	CUST952	Female	57	Clothing	1	25	25	$0.30
201	10/9/2023	CUST201	Male	56	Electronics	1	25	25	$0.30
230	4/23/2023	CUST230	Male	54	Beauty	1	25	25	$0.30
236	4/28/2023	CUST236	Female	54	Clothing	1	25	25	$0.30
855	9/1/2023	CUST855	Male	54	Beauty	1	25	25	$0.30
791	12/5/2023	CUST791	Female	51	Beauty	1	25	25	$0.30
362	11/27/2023	CUST362	Male	50	Clothing	1	25	25	$0.30
388	11/10/2023	CUST388	Male	50	Electronics	1	25	25	$0.30
379	2/5/2023	CUST379	Female	47	Clothing	1	25	25	$0.30
454	2/22/2023	CUST454	Female	46	Beauty	1	25	25	$0.30
825	8/26/2023	CUST825	Female	46	Beauty	1	25	25	$0.30
907	1/8/2023	CUST907	Female	45	Electronics	1	25	25	$0.30
989	12/28/2023	CUST989	Female	44	Electronics	1	25	25	$0.30
205	11/7/2023	CUST205	Female	43	Clothing	1	25	25	$0.30
232	2/6/2023	CUST232	Female	43	Beauty	1	25	25	$0.30
347	8/3/2023	CUST347	Male	42	Electronics	1	25	25	$0.30
558	10/8/2023	CUST558	Female	41	Clothing	1	25	25	$0.30
787	1/22/2023	CUST787	Male	41	Electronics	1	25	25	$0.30
468	12/9/2023	CUST468	Male	40	Electronics	1	25	25	$0.30
657	2/11/2023	CUST657	Male	40	Clothing	1	25	25	$0.30
744	5/7/2023	CUST744	Male	40	Electronics	1	25	25	$0.30
764	3/25/2023	CUST764	Female	40	Clothing	1	25	25	$0.30
204	9/28/2023	CUST204	Male	39	Beauty	1	25	25	$0.30
739	11/29/2023	CUST739	Male	36	Beauty	1	25	25	$0.30
486	4/9/2023	CUST486	Female	35	Electronics	1	25	25	$0.30
285	8/15/2023	CUST285	Female	31	Electronics	1	25	25	$0.30
397	3/10/2023	CUST397	Female	30	Beauty	1	25	25	$0.30
945	2/13/2023	CUST945	Male	30	Beauty	1	25	25	$0.30
310	10/12/2023	CUST310	Female	28	Beauty	1	25	25	$0.30
423	3/8/2023	CUST423	Female	27	Clothing	1	25	25	$0.30
544	12/23/2023	CUST544	Female	27	Electronics	1	25	25	$0.30
309	12/23/2023	CUST309	Female	26	Beauty	1	25	25	$0.30
427	8/15/2023	CUST427	Male	25	Electronics	1	25	25	$0.30

Commission 2023	1.2%
Commission 2024	2.3%
Total Commission	$5,472.00
Average Commission	$5.47

Print screen 4



Transaction ID	Date	Customer ID	Gender	Age	Product Category	Quantity	Price per Unit	Revenue	Commissio
191	10/18/2023	CUST191	Male	64	Beauty	1	25	25	$0.30
223	2/2/2023	CUST223	Female	64	Clothing	1	25	25	$0.30
363	6/3/2023	CUST363	Male	64	Beauty	1	25	25	$0.30
790	8/8/2023	CUST790	Male	62	Clothing	1	25	25	$0.30
967	4/17/2023	CUST967	Male	62	Beauty	1	25	25	$0.30
206	8/5/2023	CUST206	Male	61	Clothing	1	25	25	$0.30
318	10/24/2023	CUST318	Male	61	Clothing	1	25	25	$0.30
103	1/17/2023	CUST103	Female	59	Clothing	1	25	25	$0.30
658	3/12/2023	CUST658	Male	59	Clothing	1	25	25	$0.30
877	6/19/2023	CUST877	Female	58	Clothing	1	25	25	$0.30
955	7/14/2023	CUST955	Male	58	Clothing	1	25	25	$0.30
512	11/7/2023	CUST512	Female	57	Beauty	1	25	25	$0.30
952	11/13/2023	CUST952	Female	57	Clothing	1	25	25	$0.30
201	10/9/2023	CUST201	Male	56	Electronics	1	25	25	$0.30
230	4/23/2023	CUST230	Male	54	Beauty	1	25	25	$0.30
236	4/28/2023	CUST236	Female	54	Clothing	1	25	25	$0.30
855	9/1/2023	CUST855	Male	54	Beauty	1	25	25	$0.30
791	12/5/2023	CUST791	Female	51	Beauty	1	25	25	$0.30
362	11/27/2023	CUST362	Male	50	Clothing	1	25	25	$0.30
388	11/10/2023	CUST388	Male	50	Electronics	1	25	25	$0.30
379	2/5/2023	CUST379	Female	47	Clothing	1	25	25	$0.30
454	2/22/2023	CUST454	Female	46	Beauty	1	25	25	$0.30
825	8/26/2023	CUST825	Female	46	Beauty	1	25	25	$0.30
907	1/8/2023	CUST907	Female	45	Electronics	1	25	25	$0.30
989	12/28/2023	CUST989	Female	44	Electronics	1	25	25	$0.30
205	11/7/2023	CUST205	Female	43	Clothing	1	25	25	$0.30
232	2/6/2023	CUST232	Female	43	Beauty	1	25	25	$0.30
347	8/3/2023	CUST347	Male	42	Electronics	1	25	25	$0.30
558	10/8/2023	CUST558	Female	41	Clothing	1	25	25	$0.30
787	1/22/2023	CUST787	Male	41	Electronics	1	25	25	$0.30
468	12/9/2023	CUST468	Male	40	Electronics	1	25	25	$0.30
657	2/11/2023	CUST657	Male	40	Clothing	1	25	25	$0.30
744	5/7/2023	CUST744	Male	40	Electronics	1	25	25	$0.30
764	3/25/2023	CUST764	Female	40	Clothing	1	25	25	$0.30
204	9/28/2023	CUST204	Male	39	Beauty	1	25	25	$0.30
739	11/29/2023	CUST739	Male	36	Beauty	1	25	25	$0.30
486	4/9/2023	CUST486	Female	35	Electronics	1	25	25	$0.30
285	8/15/2023	CUST285	Female	31	Electronics	1	25	25	$0.30
397	3/10/2023	CUST397	Female	30	Beauty	1	25	25	$0.30
945	2/13/2023	CUST945	Male	30	Beauty	1	25	25	$0.30
310	10/12/2023	CUST310	Female	28	Beauty	1	25	25	$0.30
423	3/8/2023	CUST423	Female	27	Clothing	1	25	25	$0.30
544	12/23/2023	CUST544	Female	27	Electronics	1	25	25	$0.30
309	12/23/2023	CUST309	Female	26	Beauty	1	25	25	$0.30

Commission 2023	1.2%
Commission 2024	2.3%
Total Commission	$5,472.00
Average Commission	$5.47

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:

Student name	English	Mathematic:	Science	Average	Highest score
Carol	75	85	85		
Ted	80	75	90		
Khan	85	75	80		
Harry	80	70	80		
Sarah	80	70	80		
John	65	80	70		
Linda	90	50	70		
Edward	55	80	60		
Mary	55	70	65		
Thomas	55	30	65		

Task

1) Apply filter and sorting to show the best students in each subject.
2) Calculate the average for all students and fill into Column E. (Use formula)
3) Using the =MAX fucntion, tell me what the students highest score was in column F.
4) Apply filter and sorting to show the best student in this classroom by average.
5) Apply filter and sorting to show the best student in this classroom by highest score.
6) Use conditional formatting to clearly identify the highest and lowest average scores

Print screen 1

Student name	English	Mathematics	Science	Average	Highest score
Ted	80	75	90	82	90
Carol	75	85	85	82	85
Khan	85	75	80	80	85
Harry	80	70	80	77	80
Sarah	80	70	80	77	80
John	65	80	70	72	80
Linda	90	50	70	70	90
Edward	55	80	60	65	80
Mary	55	70	65	63	70
Thomas	55	30	65	50	65

Student name	English	Mathematics	Science	Average	Highest score
Linda	90	50	70	70	90
Khan	85	75	80	80	85
Ted	80	75	90	82	90
Harry	80	70	80	77	80
Sarah	80	70	80	77	80
Carol	75	85	85	82	85
John	65	80	70	72	80
Edward	55	80	60	65	80
Mary	55	70	65	63	70
Thomas	55	30	65	50	65

Student name	English	Mathematics	Science	Average	Highest score
Carol	75	85	85	82	85
John	65	80	70	72	80
Edward	55	80	60	65	80
Khan	85	75	80	80	85
Ted	80	75	90	82	90
Harry	80	70	80	77	80
Sarah	80	70	80	77	80
Mary	55	70	65	63	70
Linda	90	50	70	70	90
Thomas	55	30	65	50	65

Student name	English	Mathematics	Science	Average	Highest score
Ted	80	75	90	82	90
Carol	75	85	85	82	85
Khan	85	75	80	80	85
Harry	80	70	80	77	80
Sarah	80	70	80	77	80
John	65	80	70	72	80
Linda	90	50	70	70	90
Mary	55	70	65	63	70
Thomas	55	30	65	50	65
Edward	55	80	60	65	80

Student name	English	Mathematics	Science	Average	Highest score
Ted	80	75	90	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Carol	75	85	85	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Khan	85	75	80	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Harry	80	70	80	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Sarah	80	70	80	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
John	65	80	70	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Linda	90	50	70	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Mary	55	70	65	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Thomas	55	30	65	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]
Edward	55	80	60	=AVERAGE(Table2[@[English]:[Science]])	=MAX(Table2[@[English]:[Average]]

Student name	English	Mathematics	Science	Average	Highest score
Ted	80	75	90	82	90
Carol	75	85	85	82	85
Khan	85	75	80	80	85
Harry	80	70	80	77	80
Sarah	80	70	80	77	80
John	65	80	70	72	80
Linda	90	50	70	70	90
Edward	55	80	60	65	80
Mary	55	70	65	63	70
Thomas	55	30	65	50	65

Student name	English	Mathematics	Science	Average	Highest score
Ted	80	75	90	82	90
Linda	90	50	70	70	90
Carol	75	85	85	82	85
Khan	85	75	80	80	85
Harry	80	70	80	77	80
Sarah	80	70	80	77	80
John	65	80	70	72	80
Edward	55	80	60	65	80
Mary	55	70	65	63	70
Thomas	55	30	65	50	65

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

work_year	experience	employme	job_title	salary	salary_cur	salary_in_usd	employee_	remote_ratio	company_	company_size
2025	EN	FT	Data Quali	60000	GBP	75949	GB	0	GB	M
2025	EN	FT	Data Quali	48000	GBP	60759	GB	0	GB	M
2025	SE	FT	Applied Sc	266000	USD	266000	US	0	US	M
2025	SE	FT	Applied Sc	204000	USD	204000	US	0	US	M
2025	SE	FT	Data Scien	291000	USD	291000	US	0	US	M
2025	SE	FT	Data Scien	197000	USD	197000	US	0	US	M
2025	SE	FT	Data Scien	349000	USD	349000	US	0	US	M
2025	SE	FT	Data Scien	248000	USD	248000	US	0	US	M
2025	SE	FT	Data Scien	279400	USD	279400	US	100	US	M
2025	SE	FT	Data Scien	211582	USD	211582	US	100	US	M
2025	SE	FT	Data Scien	235400	USD	235400	US	0	US	M
2025	SE	FT	Data Scien	213675	USD	213675	US	0	US	M
2025	SE	FT	Data Scien	244000	USD	244000	US	0	US	M
2025	SE	FT	Data Scien	166000	USD	166000	US	0	US	M
2025	SE	FT	Data Scien	244000	USD	244000	US	0	US	M
2025	SE	FT	Data Scien	166000	USD	166000	US	0	US	M
2025	MI	FT	Data Scien	202000	USD	202000	US	0	US	M
2025	MI	FT	Data Scien	141000	USD	141000	US	0	US	M
2025	SE	FT	Data Scien	271000	USD	271000	US	0	US	M
2025	SE	FT	Data Scien	183000	USD	183000	US	0	US	M
2025	SE	FT	Data Scien	229000	USD	229000	US	0	US	M
2025	SE	FT	Data Scien	156000	USD	156000	US	0	US	M
2025	SE	FT	Data Scien	125000	USD	125000	CA	0	CA	M
2025	SE	FT	Data Scien	107200	USD	107200	CA	0	CA	M
2025	SE	FT	Data Scien	258000	USD	258000	US	0	US	M
2025	SE	FT	Data Scien	119800	USD	119800	US	0	US	M
2025	MI	FT	Data Scien	123000	USD	123000	US	100	US	M
2025	MI	FT	Data Scien	96500	USD	96500	US	100	US	M
2025	MI	FT	Manager	240800	USD	240800	US	0	US	M
2025	MI	FT	Manager	193400	USD	193400	US	0	US	M
2025	SE	FT	Software E	202000	USD	202000	US	0	US	M
2025	SE	FT	Software E	141000	USD	141000	US	0	US	M
2025	SE	FT	Software E	202000	USD	202000	US	0	US	M
2025	SE	FT	Software E	141000	USD	141000	US	0	US	M
2025	SE	FT	Software E	202000	USD	202000	US	0	US	M
2025	SE	FT	Software E	141000	USD	141000	US	0	US	M
2025	SE	FT	Software E	202000	USD	202000	US	0	US	M
2025	SE	FT	Software E	141000	USD	141000	US	0	US	M
2025	SE	FT	Software E	291000	USD	291000	US	0	US	M
2025	SE	FT	Software E	197000	USD	197000	US	0	US	M
2025	SE	FT	Software E	349000	USD	349000	US	0	US	M
2025	SE	FT	Software E	248000	USD	248000	US	0	US	M
2025	SE	FT	Machine L	277000	USD	277000	US	0	US	M
2025	SE	FT	Machine L	170000	USD	170000	US	0	US	M
2025	SE	FT	Machine L	195500	USD	195500	US	100	US	M
2025	SE	FT	Machine L	122400	USD	122400	US	100	US	M
2025	SE	FT	Machine L	220000	USD	220000	US	0	US	M
2025	SE	FT	Machine L	198000	USD	198000	US	0	US	M
2025	SE	FT	Software E	200200	USD	200200	US	0	US	M

Average Salary: $157,496.75

Remote Jobs: 29839

employment_type (All)

Sum of salary_in_usd	remote_ratio			
experience_level	0	50	100	Grand Total
EN	$1,116,604,981.00	$6,223,310.00	$180,643,546.00	$1,303,471,837.00
EX	$581,610,748.00	$1,548,132.00	$136,552,667.00	$719,711,547.00
MI	$5,134,577,419.00	$9,148,371.00	$978,504,373.00	$6,122,230,163.00
SE	$10,979,438,353.00	$9,401,985.00	$3,161,931,122.00	$14,150,771,460.00
Grand Total	$17,812,231,501.00	$26,321,798.00	$4,457,631,708.00	$22,296,185,007.00

company_location	GB			
Sum of salary_in_usd	**remote_ratio**			
experience_level	**0**	**50**	**100**	**Grand Total**
EN	$38,770,035.00	$390,602.00	$2,746,919.00	$41,907,556.00
EX	$18,202,030.00		$3,335,073.00	$21,537,103.00
MI	$117,045,172.00	$1,607,846.00	$15,259,213.00	$133,912,231.00
SE	$151,778,977.00	$1,098,858.00	$25,591,850.00	$178,469,685.00
Grand Total	**$325,796,214.00**	**$3,097,306.00**	**$46,933,055.00**	**$375,826,575.00**

Day 3: Task 1

Please download the dataset 'Day_3_Task_1_Bike_Sales_Pivot_Lab.xlsx' from here.

The lab instructions can be found here. 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

Orders By Age Group	Countries								
Age Group	Australia	Canada	France	Germany	United States	United Kingdom	United States	United States	Grand Total
Youth (<25)	11	0	10	0	0	6	0	0	27
Female	9	0	6	0	0	1	0	0	16
Male	2	0	4	0	0	5	0	0	11
Young Adults (25-34)	20	11	10	0	0	4	16	0	61
Female	17	6	1	0	0	3	10	0	37
Male	3	5	9	0	0	1	6	0	24
Adults (35-64)	32	0	0	13	2	4	47	1	99
Female	17	0	0	8	2	1	27	0	55
Male	15	0	0	5	0	3	20	1	44
Grand Total	63	11	20	13	2	14	63	1	187

In which markets does Germany have customers?

The markets in germany are for adults ages 35-64

What country has sales in all markets?

United Kingdom

What are the most profitable markets by country, age group, and gender?

Orders By Age Group	Countries						
Age Group	Australia	Canada	France	Germany	United Kingdom	United States	Grand Total
Youth (<25)	11	0	10	0	6	0	27
Female	9	0	6	0	1	0	16
Male	2	0	4	0	5	0	11
Young Adults (25-34)	20	11	10	0	4	16	61
Female	17	6	1	0	3	10	37
Male	3	5	9	0	1	6	24
Adults (35-64)	32	0	0	13	4	50	99
Female	17	0	0	8	1	29	55
Male	15	0	0	5	3	21	44
Grand Total	63	11	20	13	14	66	187

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

County	Product	Sales Volume	Sales Rating
Yorkshire	Laptops	200	Low
Yorkshire	Smartphones	700	High
Cornwall	Laptops	400	Medium
Cornwall	Printers	150	Low
Lancashire	Smartphones	600	High
Lancashire	Laptops	800	High
Essex	Printers	300	Medium
Essex	Smartphones	250	Low
Durham	Laptops	300	Medium
Durham	Printers	600	High
Greater Manchester	Smartphones	400	Medium
Greater Manchester	Laptops	400	Medium

County	Sales
Cornwall	**550**
Laptops	400
Printers	150
Durham	**900**
Laptops	300
Printers	600
Essex	**550**
Printers	300
Smartphones	250
Greater Manchester	**800**
Laptops	400
Smartphones	400
Lancashire	**1400**
Laptops	800
Smartphones	600
Yorkshire	**900**
Laptops	200
Smartphones	700
Grand Total	**5100**

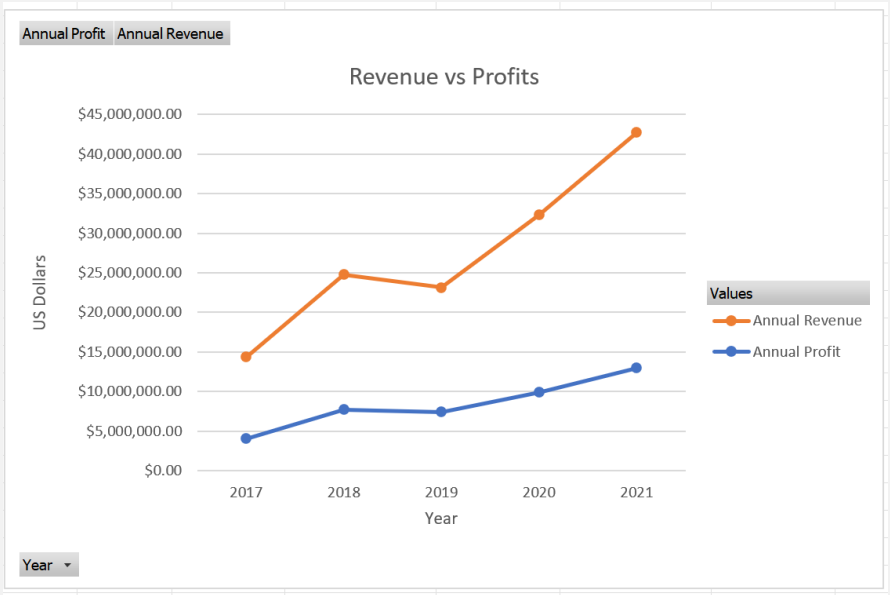
Day 3: Task 3

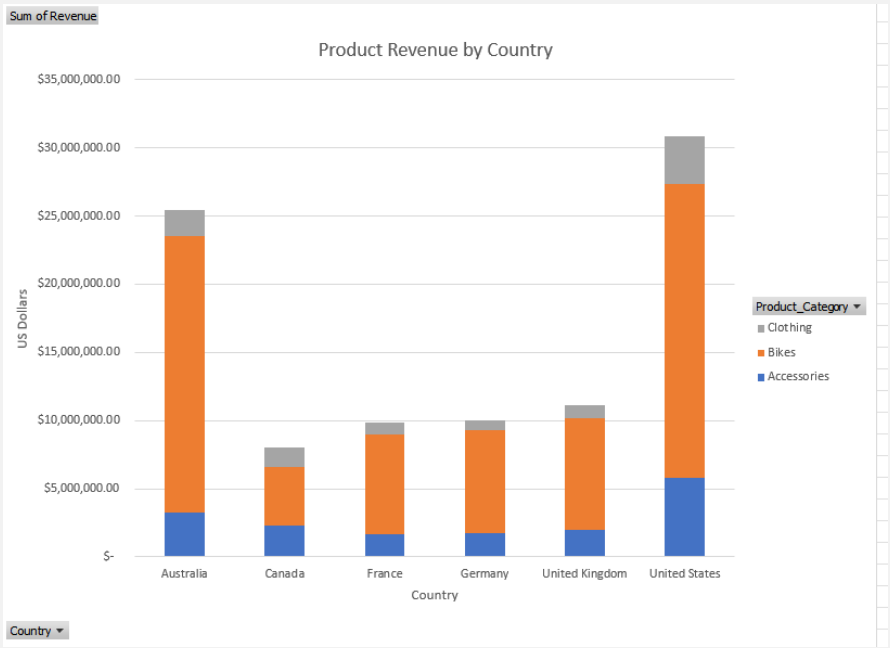
Please download the dataset 'Day_3_Task_3_Bike_Sales_Visualisations_Lab.xlsx' from here.

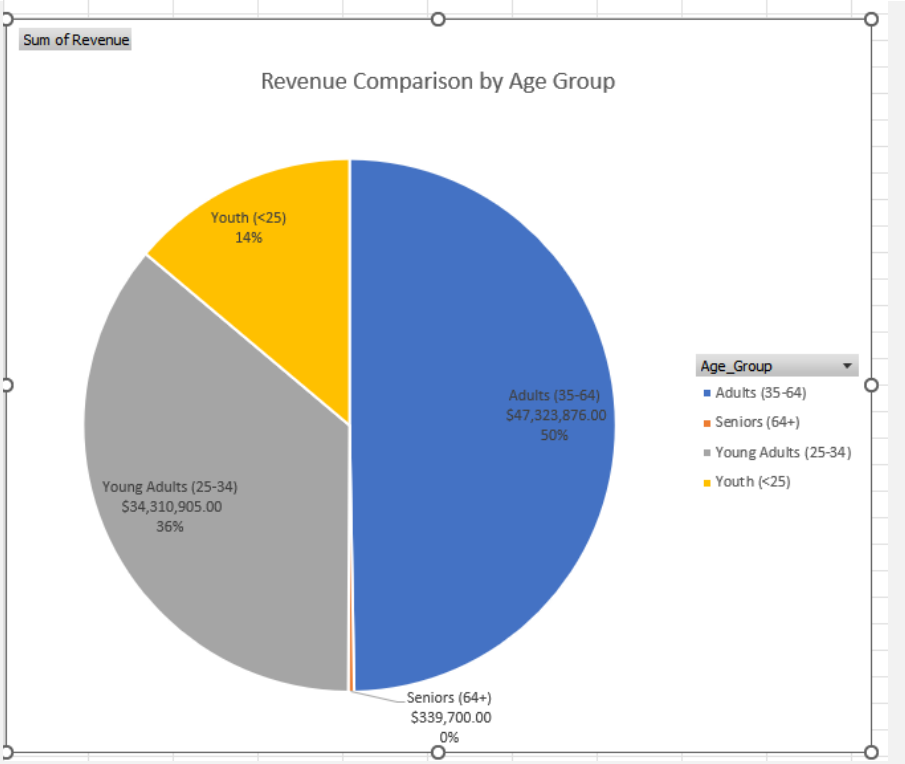
The lab instructions can be found here. Do not worry if you do not complete the lab, just working with data and playing with the charts will be good experience.

Please paste your results below:

Print screen 1






Sum of Revenue
Revenue Comparison by Age Group
Youth (<25)
14%
Adults (35-64)
$47,323,876.00
50%
Young Adults (25-34)
$34,310,905.00
36%
Seniors (64+)
$339,700.00
0%
Age_Group
Adults (35-64)
Seniors (64+)
Young Adults (25-34)
Youth (<25)

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?	• Start by learning the board members and what their priorities are using the box method and aligning my workflow/questions with their interest and power level • Give a quick summary of the data they gave me within the deadline and propose any further questions that may have come about
What tools would you use for the delivery?	• **PowerPoint –** Visualising data for board members and giving my final presentation of the findings • **Excel –** Analyse, clean up data, create pivot charts, tables and many more charts of key metrics
What is prospecting and why would you complete this before your delivery?	Prospecting is used to help you understand who the key consumers are, what the consumers wants/needs are, what the company is offering, what the company needs/wants are, this is vital as it helps give you more understanding of the data and what metrics will be more impactful on decisions

Tell me best practices for public speaking and providing updates to senior leaders	• Be clear • Get to the point • Use phrases like “in conclusion” “Secondly” • Speak with confidence • Keep presentation easy on the eye, visual over text, let your data talk for you • Be prepared for questions
What will you show the board in your delivery?	• Charts – Quarterly, yearly, profits, age groups etc... • Trends • Feedback from customers if available • Competitor data comparison if possible
How will you articulate the changes that are needed?	• Back up suggestions with data • Be direct, this is happening, this is how we fix it • Focus on buzz words like profits, customer retention, revenue • Recommend some steps, back them up with forecasting and goal seek if possible

Provide a list of online resources and videos that will support your preparation for public speaking	https://www.youtube.com/watch?v=Ns_z4wEtdRM https://www.youtube.com/watch?v=I5we4kZIQRY
Evaluate tools that provide visualisation. **Tell me what they are.** **Tell me what you would choose when delivering your presentation and why**	• **PowerPoint –** Easy to create a good visualisation for board members, easy for them to understand, flows well • **Excel –** Great for creating charts, tables and pivot tables to help read the data and create the data comparisons you want • **Power Bi –** From my understanding this is a visualisation tool that is industry standard, but I have no experience right now For initial data analysis and chart creating I would use Excel as I understand the various features and feel like I would be able to create a good analysis for the stakeholders. My presentation would be PowerPoint with many different visualisations and key metrics throughout, this would run alongside my delivery. If time allowed, I would create a simple Excel dashboard for visualisation which would be emailed to the stakeholders after the meeting, incise they wanted to go through the data themselves on an easy-to-use dashboard

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.