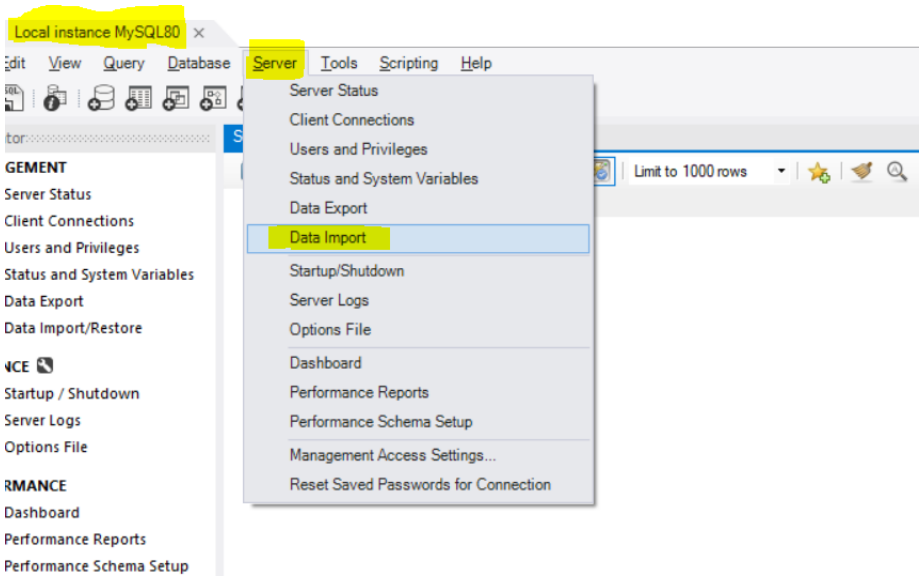
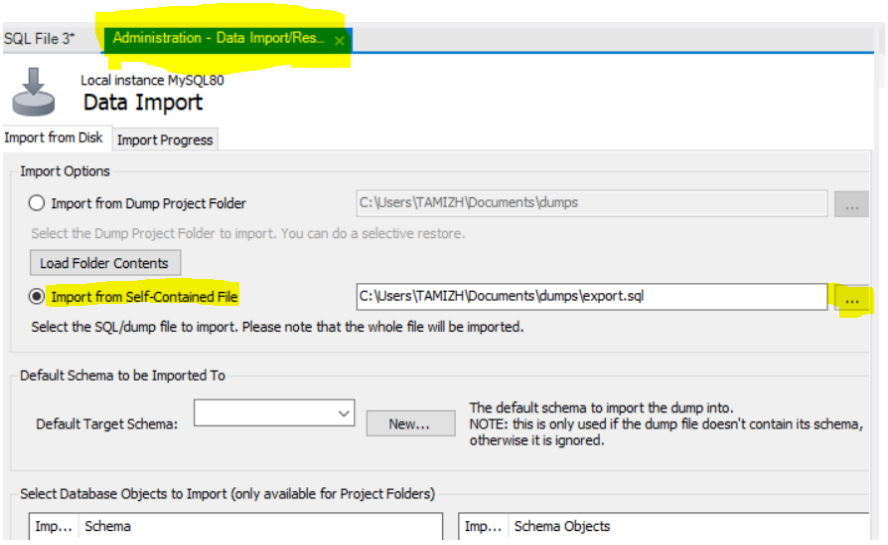
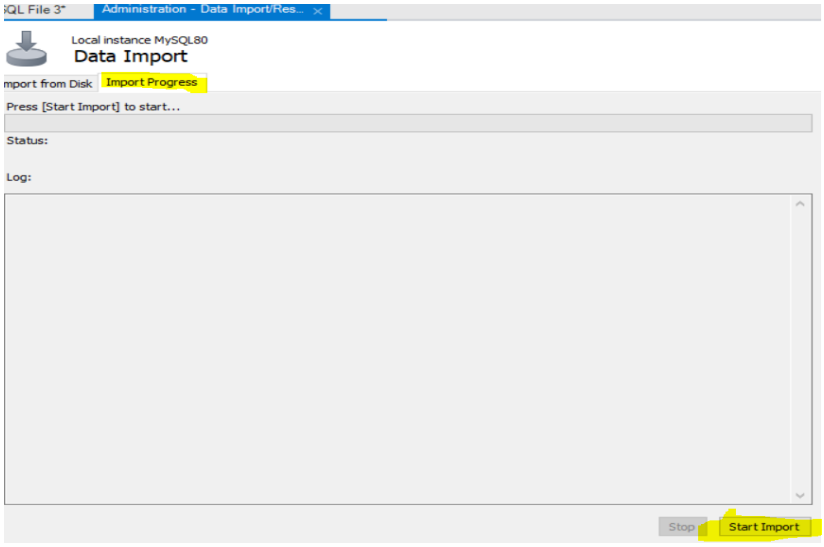
SQL Assignment

- Download the datasets from the links mentioned in the questions
- Open “Mysql workbench” and enter any instance
- Go to “Server -> Data Import”
- This will open another sql file window as “Administration- Data
- import/Export”
- Select “Import from Self-contained File” option
- Then click on the file picker icon and select “assignment1.sql” file
- Go to “Import Progress” window and “Start Import”







Follow the below steps:

- Once Imported, write queries for all the below scenarios in your mysql workbench
- Take screenshot of each answer or Query
- Paste the screenshot in a word file and repeat the steps for all the questions
- Save the word file into a PDF and upload

Question 1: Create a table with overall region sales

Dataset: https://drive.google.com/file/d/1zXHXy3zS59QMX9dfe_B0rlJN3qOg3pYo/view?usp=sharing

Input Table		
Store	Region	Sales
105	Atlanta	$200,000
106	Atlanta	$250,000
107	Atlanta	$300,000
108	New England	$100,000
109	New England	$150,000
110	New England	$270,000

Output Table			
Store	Region	Sales	Region Sales
105	Atlanta	$200,000	$750,000
106	Atlanta	$250,000	$750,000
107	Atlanta	$300,000	$750,000
108	New England	$100,000	$520,000
109	New England	$150,000	$520,000
110	New England	$270,000	$520,000

Question 2: Create a table to check for sales growth when compared to LY

Dataset: https://drive.google.com/file/d/1bqtPjoFbW0yqBFjMD7Flox53h5gBbcXN/view?usp=sharing

Input Table		
Year	Week	Sales
2018	1	$200,000
2018	2	$250,000
2018	3	$300,000
2019	1	$100,000
2019	2	$150,000
2019	3	$270,000

Output Table		
FY_2018	FY_2019	Growth%
$750,000	$520,000	-31%

Question 3: Write a query to check for Frequency(Avg shop difference between transactions), Recency and Avg spend

Dataset: https://drive.google.com/file/d/192wOxGjENS1LornhLJ0gd7U3nTlU7KIE/view?usp=sharing

Input Table		
Customer	Transaction date	Sales
John	01-Aug-19	2000
John	05-Aug-19	4000
John	15-Aug-19	1000
John	25-Aug-19	500
John	27-Aug-19	1500
John	01-Sep-19	2500
Kevin	01-Aug-19	10000
Kevin	15-Aug-19	15000
Kevin	01-Sep-19	12000

Output Table			
Customer	Frequency	Recency	Avg Spend
John	Every 6th Day	01-Sep-19	$1,917
Kevin	Every 15th Day	01-Sep-19	$12,334

Question 4: Product data enrichment (combine Additional Desc & Description into one column and do the same for MPN and Model Nbr)

Dataset: https://drive.google.com/file/d/18DUnKbtzn01iCG0jORGfI2WXUX6699ZW/view?usp=sharing

Input Table		
Product	Product Att Key	Product Att Val
847801	Description	
847801	Additional Desc	60W Equivalent Daylight Bulb
847801	Model Nbr	BPESL13T
847801	MPN	
641169	Description	100-Watt Equivalent Light Bulb Soft White
641169	Additional Desc	
641169	Model Nbr	
641169	MPN	434738

Output Table		
Product	Product Desc	Model
847801	60W Equivalent Daylight Bulb	BPESL13T
641169	100-Watt Equivalent Light Bulb Soft White	434738

Question 5: To rollout promotions, would like to understand the customer purchase trend

Dataset I: https://drive.google.com/file/d/1pqEZvBy5SoZPKra2ZGWFpUxst1XJ66gn/view?usp=sharing

Dataset II: https://drive.google.com/file/d/1KZqS9KcfSyD4DER6mBu11LVggorv_i7K/view?usp=sharing

Store Purchase Table	
Customer	Sales
John	$25,000
Kevin	$15,000
Alex	$10,000
Dave	$12,000
Nancy	$18,000

Internet Purchase Table	
Customer	Sales
Alex	$2,000
Nancy	$1,000
Mark	$2,500
James	$30,000
Kevin	$500

Output Table	
Customer	Channel
John	Store Only
Kevin	Online & Store
Alex	Online & Store
Dave	Store Only
Nancy	Online & Store
Mark	Online Only
James	Online Only

Question 6: Calculate Percentile ranks based on sales and group them into high (75 -100 ptile), mid (30 – 75 Ptile) , low (less 30 ptile) as shown below

Dataset: https://drive.google.com/file/d/18XXwY0N-96ElhsuiafSDqR1-I2dFdxEF/view?usp=sharing

Input	
Store	Sales
105	200000
106	250000
107	300000
108	100000
109	150000
110	270000

Output		
Store	Sales	Bucket
108	100000	Low
109	150000	Low
105	200000	Mid
106	250000	Mid
110	270000	High
107	300000	High