Assignment:

- 1. SQL
- 2. Python Pandas

QUESTIONS SHEET:

[EASY Questions]

- 1. First and Last Purchase Date for Each Customer
- 2. Select All Products in Our Catalog
- 3. Find Specific Products with a Sales Price Greater Than \$50
- 4. Count of Orders for Each Customer
- 5. Total Number of Unique Customers That Have Purchased from Us
- 6. Total Number of Unique Customers by Product
- 7. Summarize Sales by Product
- 8. Summarize Sales by Month
- 9. Find Orders Within a Date Range
- 10. Customers with No Orders
- 11. Total Sales Per Customer
- 12. Average Sales Price of Products in Each Category
- 13. Find the Top 5 Products with the Highest Total Sales
- 14. Find the Total Number of Returns Made by Each Customer
- 15. Total Clicks Grouped by Month
- 16. Total Clicks by Device Type
- 17. Total Clicks from Campaigns
- 18. Conversion Rate by Device Type (Clicks and Orders)

[MEDIUM QUESTIONS]

- 1. Highest Total Sale for an Order & Total Orders at Highest Price
- 2. Customers Who Have Ordered Every Product
- 3. Total Lifetime Sales, Order Count, and Average Order Value for Every Customer
- 4. Highest Number of Orders Placed by a Customer & Who Was It
- 5. What Did This Customer Purchase? (Follow-up to Previous Question)
- 6. Highest Total Returns Made by a Customer
- 7. Top 5 Reasons for Returning a Package
- 8. Total Amount of Sales Price Returned from Orders

- 9. Breakout Amount of Returned Orders by Product (Including Product Name)
- 10. Percent of Total Orders Returned
- 11. Percent of Total Orders Returned by Product
- 12. Highest Returned Product by Percent
- 13. Conversion Rate Calculation (Clicks to Orders)
- 14. Campaign Analysis: Total Orders, Clicks, Sales, Units for Each Campaign
- 15. Campaign with the Highest Conversion Rate
- 16. Discount/Promo That Generated the Most Sales

[HARD QUESTIONS]

- 1. Most Sold Product in the Best Performing Campaign (By Unit and Sale Price)
- 2. State with the Highest Total Sales
- 3. Highest Selling Products by State (Ranking)
- 4. List Customers Who Have Never Used a Discount
- 5. Update the Query to Count Total Distinct Customers Who Never Used a Discount
- 6. Average Frequency of Customer Repurchasing (Bucketed into Timeframes)