Hands-on Exercise No. 2 **DigiSkills 2.0 Batch-08** **Data Analytics & Business Intelligence**	**Total Marks: 10** **Due Date: 22/08/2024**

Instructions:

Please read the following instructions carefully before submitting this Hands-on Exercise:

- Use MS Word to prepare exercise solution.
- You may consult tutorials and videos if the concept is not clear.
- Your submitted exercise will not be considered/counted if:
  - It is submitted after due date.
  - It is not in the required format (.doc or .docx)
  - It does not open, or file is corrupt.
  - It is copied (partial or full) from any source (websites, forums, students, etc.)

Learning Outcome:

After completing this exercise, you shall be able to:

- Use pivot tables to isolate and summarize specific data.
- Sort and filter data to prepare it for visualization.
- Insert and customize scatter plots in Excel.
- Analyze data visualizations to identify outliers.
- Determine actions to handle outliers for accurate data analysis.
- Generate and interpret scatter charts to visualize data distributions.

Problem Statement

An outlier is a value or data point that varies significantly from others in the same dataset. An outlier can result from variability in the measurements, experimental errors, or human error in entering the data. To make sure that any data analysis is correct, outliers need to be identified and then it needs to be determined how best to treat them and a scatter chart can help to identify outliers, especially in larger datasets.

Tasks:

1) Download the dataset from the following link: https://lms.digiskills.pk/Courses/DBI101/Downloads/Bike_Sales_Outlier_Lab.xlsx and open the downloaded sample xlsx. file Bike_Sales_Outliers_Lab in Microsoft Excel. (Provide the screenshot)
2) Create a Pivot table using column **Date** and **Order_Quantity**. (Provide the screenshot)
3) After creating Pivot table **Sort** the **Sum of Qrder_Quantity** column from high to low. (Provide the screenshot)
4) Using the Pivot table column **Sum of Order Quantity** create a **Scatter chart** to find the outlier. (Provide the screenshot of Scatter chart and write the number of outlier)

Requirements:

In this exercise you are required to perform all the given tasks and provide:

- Screenshots of Task 1, 2, 3 and 4 and also write the answer of task 4.
- Submit the completed tasks in word document.

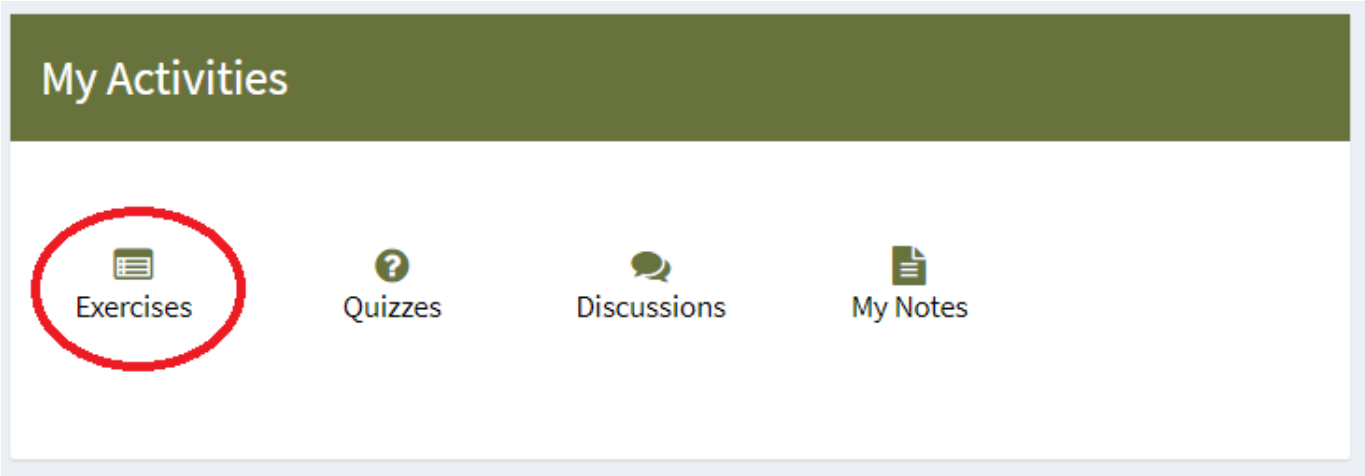
BEST OF LUCK ☺

How to submit solution file on LMS?

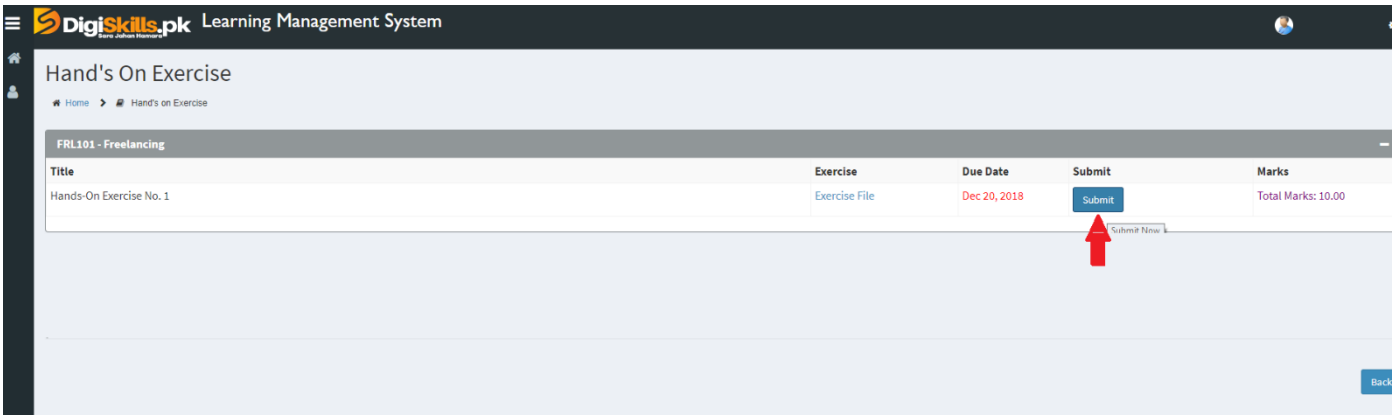
Please perform the following steps for submitting your solution using LMS:

1) Login to the LMS

2) Click on the **Exercises** button within the **My Activities** section



3) Click on the submit button to upload your Solution.



4) Keep in mind to upload your Solution in .doc or .docx format