**Iris Dataset Analysis Report**

1. **Introduction**

| **Project Goal** | *Relationship among Iris flower dataset features (sepal length, sepal width, petal length, petal width) and use Excel for data analysis***.** |  |
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1. **Dataset Overview**

| **Dataset** | **Iris Flower Dataset** |
| --- | --- |
| **Source** | *Website* |
| **Features** | *Sepal Length, Sepal Width, Petal Length, Petal Width* |
| **Data Cleaning** | *The data was thoroughly clean, it`s ready for presentation.* |

1. **Statistical Analysis**

**3.1. Descriptive Statistics**

| **Feature** | **Mean** | **Median** | **Mode** | **Range** | **Variance** | **Standard Deviation** |
| --- | --- | --- | --- | --- | --- | --- |
| Sepal Length | 5.907 | 6.3 | 6.5 | 2.5 | 0.713 | 0.844 |
| Sepal Width | 3.06 | 3.1 | 3 | 1.3 | 0.94 | 0.307 |
| Petal Length | 3.873 | 4.6 | 1.4 | 4.7 | 3.341 | 1.828 |
| Petal Width | 1.247 | 1.5 | 0.2 | 2.3 | 0.642 | 0.802 |

**3.2. Visualizations**

| **Visualization Type** | **The range of 4 to 6.7 has higher frequency compare to the range of 1.3 to 4** |
| --- | --- |
| **Histograms** | *Histograms were created for each feature to show their* *the range of 2.3 to2.75 is the lowest width range* |
| **Line Chart** | *.* The sapel length has high frequency compare to width |
|  |  |

**3.3. Correlation Analysis**

| **Feature Pair** | **Correlation Coefficient** |
| --- | --- |
| Sepal Length vs. Sepal Width | -0.1609 |
| Sepal Length vs. Petal Length | 0.8854 |
| Sepal Length vs. Petal Width | 0.8252 |
| Sepal Width vs. Petal Length | -0.3818 |
| Sepal Width vs. Petal Width | -0.3579 |
| Petal Length vs. Petal Width | 0.9860 |

| **Correlation Matrix** | **Sepal Length** | **Sepal Width** | **Petal Length** | **Petal Width** |
| --- | --- | --- | --- | --- |
| **Sepal Length** | 1 | -0.1609 | 0.8854 | 0.8252 |
| **Sepal Width** | -0.1609 | 1 | -0.3818 | -0.3579 |
| **Petal Length** | 0.8854 | -0.3818 | 1 | 0.9860 |
| **Petal Width** | 0.8252 | -0.3579 | 0.9860 | 1 |

1. **Findings and Conclusion**

| **Findings** | **Sapel length and sapel width has weak linear relationship compare to Patel length and width** |
| --- | --- |
| **Conclusion** | *In conclusion sapel width has low frequency compare to sapel length* |

1. **Appendices**

| **Appendix** | **Details** |
| --- | --- |
| Data Cleaning | *Log of any data cleaning steps, such as handling missing values or corrections.* |
| Excel Formulas | *List and explanation of Excel formulas used (e.g., =AVERAGE(), =MEDIAN(), =CORREL()).* |
| Visualizations | *Copies of all visualizations created during the analysis.* |

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