

Answer#1: Distributions of feature in Dataset:

- **Sepal Length & Width:** Show overlap between species, less distinctive.
- **Petal Length & Width:** Clear separation, key for species identification.
- **Distributions:** Visualized using histograms and box plots in the code.
- **Overall:** Petal features are more informative for classification.
- **Code insights:** `sns.histplot`, `sns.boxplot` show these patterns.

Answer#2: Strong correlations between features

- **Strongest:** Petal length and petal width are highly correlated (0.96).
- **Moderate:** Sepal length correlates with petal length (0.87) and width (0.82).
- **Visualization:** `sns.heatmap` in your code shows these relationships.
- **Implication:** Some features provide redundant information.

Answer#3: Strong correlations between features

- **Petal Size:** Setosa has much smaller petals than Versicolor and Virginica.
- **Sepal:** Setosa tends to have wider, shorter sepals. Virginica has the longest.
- **Visualization:** Code's plots (histograms, scatter, pairplot) clearly show this.
- **Distinction:** Petal size is the most reliable differentiator.