Ids lab 9 task 1 distribution of features

Sepal Length:

Shape: Mostly bell-shaped (like a normal distribution), but slightly skewed to the right (meaning there are a few flowers with longer sepals).

Range: Most sepal lengths fall between 5 cm and 7 cm.

Sepal Width:

Shape: Roughly bell-shaped, but with a wider spread and a slight peak around 3 cm.

Range: Sepal widths vary more, mostly between 2.5 cm and 4 cm.

Petal Length:

Shape: Has two distinct groups: one around 1-2 cm (likely for one species) and another around 4-6 cm (for other species).

Range: Petal lengths span a wide range, from about 1 cm to almost 7 cm.

Petal Width:

Shape: Similar to petal length, with two groups: one around 0.1-0.5 cm and another around 1.5-2.5 cm.

Range: Petal widths also vary greatly, from very narrow (around 0.1 cm) to relatively wide (around 2.5 cm).

Task 2 correlation of features

Strong Correlations:

Petal Length and Petal Width: These two are best friends! If a flower has long petals, it's very likely to have wide petals too. They change together in a similar way.

Sepal Length and Petal Length: These are also good friends, but not as close as petal length and width. Longer sepals often come with longer petals, but there are more exceptions.

Moderate Correlations:

Sepal Length and Petal Width: There's some connection, but it's not as strong. Longer sepals might suggest wider petals, but it's not a guarantee.

Weak or No Correlations:

Sepal Width and the other features: Sepal width doesn't seem to have a strong relationship with any of the other features. It changes more independently

Task 3

Setosa:

Petals: They have the smallest petals, both in length and width. Think of them as having dainty, petite petals.

Sepals: Their sepals are relatively short and wide.

Overall: Setosa is the most distinct and easily identifiable species due to its small petals.

Versicolor:

Petals: Their petals are medium-sized, larger than Setosa but smaller than Virginica. Think of them as having "in-between" petals.

Sepals: Their sepals are also medium-sized, longer and narrower than Setosa.

Overall: Versicolor falls somewhere in the middle, sharing some characteristics with both Setosa and Virginica.

Virginica:

Petals: They have the largest petals, both in length and width. Think of them as having bold, showy petals.

Sepals: Their sepals are the longest and relatively narrow.

Overall: Virginica is often the largest and most striking species due to its prominent petals.