Observations for each visual

Distribution Plots

• Bar Chart (Survived – Prediction):

The bar chart makes it clear that most passengers were predicted **not to survive**. There are a lot more deaths (0) than survivors (1), showing the predictions are strongly tilted toward non-survival.

Histogram (PassengerId):

The histogram shows the passenger IDs are spread out evenly across the range. Since IDs just increase in order, every ID appears about the same number of times, which makes sense for an identifier column.

• Boxplot (PassengerId):

The boxplot looks balanced, with the middle line sitting near the center and both sides stretching out almost equally. There aren't any extreme outliers, which fits with the IDs being evenly spaced numbers.

Relationship Plots

Heatmap (PassengerId vs. Survived):

The heatmap shows that there's basically no link between a passenger's ID number and whether they survived. The correlation is so close to zero that the ID clearly doesn't influence survival.

• Pairplot / Scatterplot (PassengerId vs. Survived):

In the scatterplot, all the points line up at either 0 or 1 on the survival axis, with no real trend as the ID goes up. It looks completely random, confirming that the ID has no effect on the prediction outcome