For my descriptor I opted to choose departure delay, now despite the thought that if you leave late then you will arrive late. I wanted to put it to the test and check if that’s necessarily true because “correlation does not equal causation.” Now with the snippet of code below it removes all the null values from the data set when looking at the departure delay and arrival delay columns. When viewing the scatter plot that was made we can see there’s a positive correlation between departure delay and arrival delay.

A screenshot of a computer

AI-generated content may be incorrect.

A graph with blue dots

AI-generated content may be incorrect.

Now when analyzing if the graph above has any merit through our code below which runs the OLS model we can see that we have an R-squared value of .927 meaning that the departure delay does have a strong relationship to the arrival delay. This is also reinforced when looking at the P-value represented by a value of 0.0 and seeing at how that is lower than the industry standard of .05 we can safely say that there is a significant association between departure delay and arrival delay.

A computer screen shot of a computer screen

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A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer screen

AI-generated content may be incorrect.

In conclusion, it is safe to assume that the idea that if the plane leaves late then odds are it will end up arriving late thus proving in this instance that correlation does equal causation.

AI DISCLOSURE:

A screenshot of a computer

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