**Observation and Implication based on the results – Assignment 5**

All the analysis are based on the results from the Panda python from Assignment 5.

One of the observations found is that certain drug regimens have higher number of records than other. When comparing the values from the bar chart, Propriva has less observed Mouse Timepoint than Capomulin and Ramicane. One reason would be that it is more lethal and so some of the mouse test subject hasn’t survived the full duration of the test. However, there may be a possibility that the drug has removed the tumour.

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The second observation found is how long a drug takes to influence the tumour size. With a line graph based on one of the mouse subject and specific drug regimen. The graph shows when the drug begins to neutralise the tumour, causing it to shrink in volume after 30 days. However, between day 10 to 20, the volume increase which means that the drug dose is small (proved by the large number of mouse data from the bar chart) and so it takes longer for the drug effect to occur.

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The third observation would be the correlation between the tumour volume and the mouse weight. The scatterplot showcases a relatively straight line, with the line annotated and the value of 0.84 supporting the claim. This means that the tumour size does have some dependency on the mouse’s weight. One possible reasoning may be that the weight would mean the mouse is bigger, which in turn means the tumour size grows as well.

A graph with a red line and blue dots

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