AMAZON FOOD REVIEW

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The data used in this project is taken from <https://www.kaggle.com/snap/amazon-fine-food-reviews> and consists reviews of food from Amazon. The data has a 'Score' column, starting from 1 to 5 and 5 being the very positive review. Then we noticed that good scored reviews have longer text. Our hypothesis is that if a review is long it has a higher rating. Our prediction will be based on this.

The initial hypothesis testing shows that:

Then we search the most used words in highest and lowest scored reviews’ texts separately while counting the word count. We made lists with positive and negative words. We searched their frequency in every review to prove our hypothesis. If a text has positive words in it we add 1 to its overall positive score and same thing for negative words.

According to these features we made a decision tree and knn analysis. Knn’s accuracy was 0.84 and decision tree gives 0.85 accuracy. So for this case we would prefer decision tree because of its higher accuracy.

**PROJECT EVALUTION**

1. We encountered difficulties about finding features that we used. We weren’t sure about how many features that we should use.
2. If we were given sufficient amount of resources, we would use more datasets from several years and we would compare them.
3. We used KNN and decision tree methods. We prefer decision tree method because it is easier to use and give more accurate result for our hypothesis.
4. We could use more machine learning techniques to prove our hypothesis.We used 2 of them because they were the more reliable ones for our data.