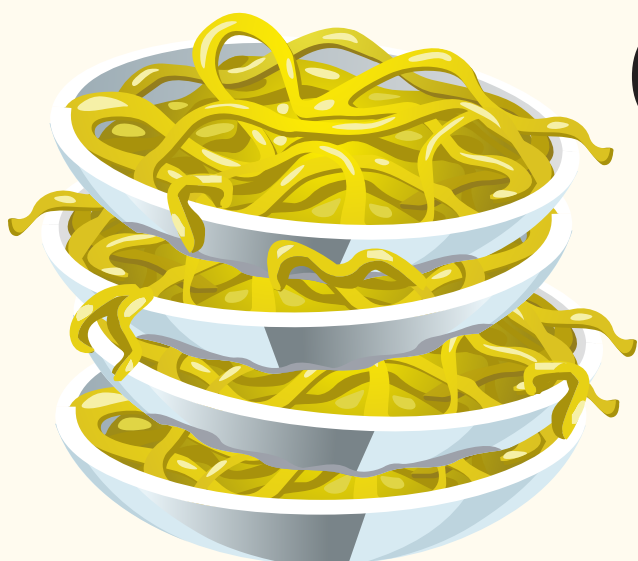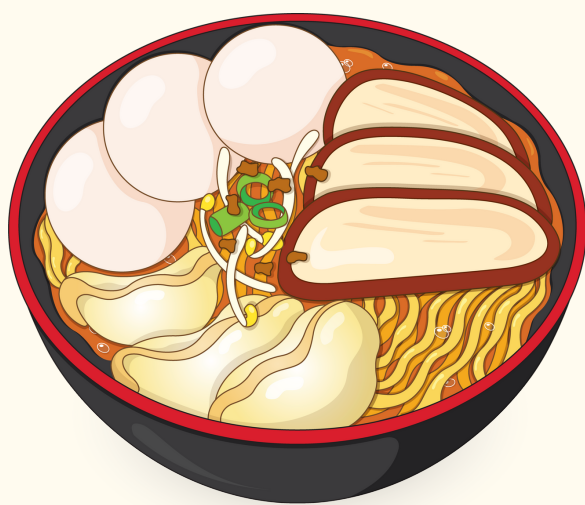# Association Rule Learning

The Case Study is about Restaurants in New York City. We have a dataset with the cuisine, boroughs, and sanitary grade. The goal is to find associations with the data.

Association Rule Learning works like a simple and interpretable recommender system.

01 DATA PREP

The preparation is simple, but there are some steps we need to take. The first is to create a list with the "transactions", which are the observations.

02 ENCODING

The next step is to encode all transactions into a dataframe. Please use the framework shown in the practice tutorial.

03 ASSOCIATION RULE LEARNING

The modeling part is super easy but it is not a black and white situation. Different values for *Support* and *Confidence* give different results. Try some and see the different outputs.

04 VISUALIZATION

A super cool feature of Association Rule Learning is the visualizations we can do. For instance, we can see how different values are connected to one another.

Granted, visualizations are frequently challenging to create, but they look perfect for presenting.