Bob is planning to develop an automated restaurant suggestion app like Yelp. This app should be able to recommend restaurants based on the factors of ‘price’ and 'ratings'. Your task is to answer the following questions:

1. Explain how this algorithm can help in application development.

As demonstrated in this lab, this algorithm is efficient in storing multiple pieces of information within a data object (such as the restaurant class) within a larger data structure (hash table). IT makes it easy for vendors or restaurant managers to be able to access the information within each class stored within the table in an easy, portable, and easily manageable (all-in-one resource) way. Once a piece of information specific to the data (or restaurant in this case) is found, it is easy to find the necessary information parsed through the hash table, with an O(n) complexity to follow the bucket through the various algorithms of parsing through.

2. Can you suggest a third factor which can be included in this kind of recommendation app? For example: the distance from your location.

The table stored a restaurant class which we made hold only rating, name, and pricing. The data object could’ve stored more information like reservation timings, distance from a location, access to the menu, wait staff information, or even drink orders. Other common things on websites lately have been if delivery, pickup, or carryout are options. We could list that within the data object Restaurant to be stored in the hash table as well.