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Journal Week 5

CS-260

* What impact does a hashing algorithm have on performance?

Hash tables are amazing for one reason. The speed. Hash tables have a constant speed in most cases and are always recommended if it is possible. Hash tables also vary on implementation, ideally it is a great data structure and has the best speed however if implemented wrong it could change those odds.

* Beyond indexing data, what other uses might a hashing algorithm have?

Hash tables are used all around us even if we don’t know it. All of these billion-dollar companies make money by being the fastest/best at what they do. For example, googles search algorithm is one very large hash data structure. Whenever we log into a system it is probably a data structure that stores our password with our login name.

There is a weakness though to hash tables, that being collisions. Collisions happen when an inputted key gives more than one value/output. As mentioned above this changes the time complexity of the algorithm as well as the complexity of the structure itself.