Hashing

# What is hashing?

Hashing is a method of sorting and indexing data. The idea behind hashing is to allow large amounts of data to be indexed using keys commonly created by formulas

Let’s say we have three words (Apple, iPhone, MacBook) and we use a magic function to convert them into integers using a formula:

Apple 🡺 18, MacBook 🡺 20, iPhone 🡺 22

And then we insert these words in the index that we got from our magic function.

## Why Hashing?

It is time efficient in terms of Search operation.

If we have many collision it takes O(N) time complexity but in the best cases it rakes O(1) time complexity.