

## Task #1

What is the difference between Front-end and Back-end?

Front-end is the user-facing interface that display information, handle interactions and keep the user focus where it needs to be, it also includes accessibility and user experience.

Back-end on the other hand is what does the actual heavylifting, which includes storing and retrieving user data, handle the user authentication and authorization by providing an API that the user through the Front-end can communicate with the server.

## Task #2

What do you know about the following: arrays, strings, linked lists, and hash tables?

arrays can store variable number of items unknown before hand, they allow for items iteration, modification and deletion.

strings can store and operate on text like inputs, in some programming languages they are considered an array of characters.

linked lists just like arrays are used to store and iterate over data, they also provide a way to sort the array in place by changing where each item points instead of moving the actual data. but they however does not allow for random access like arrays.

hash tables are another way to store and retrieve unique data, they do this very fast as knowing the hash of the item you want means you can read it in just one table lookup instead of actually searching for it.