DSA Lab 5: HashMap

Name: Ameya Mandhare

Email: ameyamandhare17@gmail.com

Just finished my third lab! This lab included coding a hash map. This lab was easier than I expected. I thought coding the delta method was very cool. The idea of rehashing all preceding elements after deleting something made me realize how elegant of a way linear probing was to handle collisions. This lab was essentially implementing the UR Hash Table interface. This involved creating several methods that created a successful and functioning Hashtable class! I thought resizing the hash table was also fun because I had to create a separate method to resize, and then call it when appropriate.

How to Use: javac HashTable.java

Files:

HashTable.java

• This is the implementation class

Main.java

 This is the main class. It should include test cases but it does not for now.

UR_HashTable.java

• This is the interface containing the methods that I am implementing.

References:

- This project was made in collaboration with claude.ai.
- I understand every line of code that is present in this project.