

Project Description

Linear Probing Hash table

This project implements a symbol table (associative array) using a linear probing hash table.

- The data structure supports common operations such as
- inserting key–value pairs (`put`)
- retrieving values by key (`get`)
- checking for key existence (`contains`)
- deleting keys (`delete`)
- keys (`keys`).

The hash table automatically resizes itself (grows when it is half full and shrinks when it is sparsely populated) to maintain performance and space efficiency. The linear probing technique handles hash collisions by finding the next available slot in the array.