

Lab – 11
06/04/2025

Hash ADT – Hash Table

Note:

1. Use only Visual Studio code type your program and run your code.
2. Always follow industry coding best practices.

A. Write a separate C++ menu-driven program to implement Hash ADT with Linear Probing. Maintain proper boundary conditions and follow good coding practices. The Hash ADT has the following operations,

1. Insert
2. Delete
3. Search
4. Display
5. Exit

What is the time complexity of each of the operations? **(K4)**

B. Write a separate C++ menu-driven program to implement Hash ADT with Quadratic Probing. Maintain proper boundary conditions and follow good coding practices. The Hash ADT has the following operations,

1. Insert
2. Delete
3. Search
4. Display
5. Exit

What is the time complexity of each of the operations? **(K4)**

C. Write a separate C++ menu-driven program to implement Hash ADT with Separate Chaining. Maintain proper boundary conditions and follow good coding practices. The Hash ADT has the following operations,

1. Insert
2. Delete
3. Search

4. Exit

What is the time complexity of each of the operations? **(K4)**