Fundamentals of Data Structures using C

Collision

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Introduction

- The hash function takes some key values as input, performs some mathematical calculation, and generates hash key to ascertain the position in the hash table where the record corresponding to the key will be stored.

- However, it is quite possible that the hash function generates same hash keys for two different key values.

- That means, two different records are indicated to be stored at the same position in the hash table.

- This situation is termed as collision.

Introduction

- As a result, a hash function must be designed in such a way that the possibility of a collision is negligible.

- Various techniques such as, linear probing, chaining without replacement, and chaining with replacement are used to evade the chances of a collision.

Various Techniques of Hashing

- Separate chaining

- Open addressing

  - Linear probing

  - Quadratic probing

  - Double hashing

- Rehashing

- Extendible hashing

Queries?

Thank You!