Notes lecture 10

Coalesced chaining & open addressing

*Coalesced:*

* + Repr:

A computer screen shot of a computer code

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* + Initially:
    - the hash table is empty
    - all next values are -1
    - the first empty position is position 0
  + When we need to add a new element and its position is occupied, we add it to firstEmpty and set the links
  + Remove: (, but on average)
    - Search for element à found at elem\_pos
    - Start from elem\_pos and iterate the linked list
      * If we find an element on other\_pos that should be on elem\_pos
        + Put it on the elem\_pos and repeat for other\_pos
      * Else
        + Just remove elem by setting links of neighbours

*Open addressing:*

* hash function becomes h(k,i)
  + i = probe number
  + = probe sequence
    - permutation of
  + linear probing
    - probe sequence:
    - idea:
      * try to add at position
      * if not possible move to right (circularly) and try again
  + quadratic probing
    - probe sequence:
    - For , permutation
    - For prime, permutation
  + Double hashing
    - permutation only if:
      * and always returns an odd number
      * prime and returns a number from
* Representation:

A close-up of a computer screen

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* To remove an element à use a special value DELETED

A white paper with black text

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