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Cs 120

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Week 13 Notes

* Linked list
  + Similar to arrays but size can be added or subtracted while the program is running

Class node{

Private:

Node \*next; // holds address to next node

Node \*previous // holds address to previous node

String name;

Char middle\_initial;

Int ID;

};

Class linkedlist{

Private:

Node \*head;

Node \*tail;

Int size;

Public:

Void insert();

Void find();

}

Int (){

Linkedlist creatures;

Creatures .insert();

Creatures.find();

Creatures.remove();

Creatures.pop();

}

* + The names node and next don’t have to be named this
    - Data type of pointer has to be the same name as the class
  + Next pointers hold an address to the next node object in the linked list
    - Last node in list holds the address “null” for its next pointer
  + Pointers named head and tail are at the front and end of the linked list respectively
  + Also a good idea to have an int variable of size
* Recursive function
  + A function which calls itself
    - Make sure there is an end condition so there isn’t an infinite loop