email if you want to be less miserable
- midterm grades tomorrow in class
- Friday 3 out - due next Thursday

Announcements:

CS 180 - Vectors
Vectors

like lists in python

$\rightarrow$ my vector[5] = 6.0

Extendable: if array is too small, double it & copy everything

Time: $O(N)$ time for $N$ insertions

(not $O(1)$ time per operation)
class Vector<T, ItemType> {
    Item* data;
    int numItems;
    int currentCapacity;

    private:
        template<typename ItemType>
        Painter<
        
        Code:
3

return data[index];

3

ItemType & operator[](int index)

3

delete & data;

nvector<>

3

(data, new ItemType[INITIAL_CAPACITY], num_items, 0) current_capacity (INITIAL_CAPACITY) vector <ItemType> ()

public:
delete data;
for (int i = 0; i < numItems; i++)
    if (i < index - 2)
        delete data[i];
for (int i = 0; i < index; i++)
    data[i] = oldData[i];
for (int i = index; i < numItems; i++)
    if (CurrentPacket == CurrentPacketType)
        if (CurrentPacketSize == numItems)
            if (CurrentPacketType == Index out of Range)
                /* Function to insert an element into the vector */
                insert (data);
```plaintext
3
num_items += 1
data[indx] = value
3
if data[index] = data [i-1]
for (int i = num_items - 1; i >= index; i--)
else
```
return this;

data[ illicit ] =来说。数据。

for (int i = 0; i <= numItems; ++i)
    context.city = other. context.city;
    numItems = other.numItems;

delete t;

if (this.i = &other)
    Vector& tempBuffer = (const Vector&)
        assignment operator = tempBuffer;