

# CSE 12 – Basic Data Structures and Object-Oriented Design

## Lecture 16

Greg Miranda, Fall 2020

# Announcements

- Quiz 16 due Friday @ 9am
- Survey 6 due Friday @ 11:59pm
- PA5 due Thursday @ 11:59pm
  - Not Wednesday – holiday → no class
- PA6 released Thursday
- Game/Movie Night Social on Friday @ 7pm → pizza
- Practice Map Problems – see schedule
- Degree Planning EC due Friday @ 11:59pm



# Topics

- Map and HashTable
- Questions on Lecture 16?

# Hash Table – draw the pictures (Separate Chaining)

```
int getIndex(String k) {  
    return k.length();  
}
```

# of buckets – 4

(i.e. the size of the array)

expandCapacity() called in set()

LoadFactor – 0.75

```
set("Smith", 1);  
set("Johnson", 2);  
set("Williams", 3);  
set("Brown", 4);  
set("Jones", 5);  
set("Garcia", 6);  
set("Miller", 7);  
set("Davis", 8);  
set("Rodriguez", 9);  
set("Martinez", 10);
```

Questions on Lecture 16?