# CSE 12 — Basic Data Structures and Object-Oriented Design Lecture 16

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#### Announcements

- Quiz 16 due Friday @ 9am
- Survey 6 due Friday @ 11:59pm
- PA5 due Thursday @ 11:59pm
  - Not Wednesday holiday
- PA6 released Thursday
- Game/Movie Night Social on Friday @ 7pm
- 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)

```
set("Smith", 1);
int getIndex(String k) {
                                            set("Johnson", 2);
  return k.length();
                                            set("Williams", 3);
                                            set("Brown", 4);
                                            set("Jones", 5);
                                            set("Garcia", 6);
# of buckets – 4
                                            set("Miller", 7);
   (i.e. the size of the array)
                                            set("Davis", 8);
expandCapacity() called in set()
                                            set("Rodriguez", 9);
LoadFactor – 0.75
                                            set("Martinez", 10);
```

## Questions on Lecture 16?