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

Greg Miranda & Paul Cao, Winter 2021

Announcements



- Quiz 16 due Wednesday @ 8am
- Survey 6 due tonight @ 11:59pm
- PA6 due Wednesday @ 11:59pm
- Practice Map Problems see schedule



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?