

Q1 Instructions

0 Points

To receive full credit on this quiz, you must score at least 50%.

The Github repo for Lecture 15 is at:

<https://github.com/ucsd-cse12-sp21/ucsd-cse12-sp21.github.io/tree/master/lectures/lecture-15>

Q2 Hash Tables

1 Point

Which of the following statements about hash tables is/are true? Refer to the hash table from lecture 15.

☒ Items are stored as key, value pairs☒ All keys must be unique☐ All values must be unique☒ A hash table can have keys of only one type☐ A hash table can have values of multiple types

Q3

1 Point

```
int getIndex(String k) {  
    return k.length() % 10;  
}
```

Using the above hash function, which of the following pairs of subsequent set calls will result in a collision, assuming that the current number of buckets is large enough to store all the elements (i.e. the array is large enough to store all the elements)? (the hash table uses String keys and double values)

☐ set("shampoo", 2); set("conditioner", 3);☒ set("boba", 4.5); set("crispy chicken", 8.5);☐ set("sandwich", 4); set("salad", 5);☒ set("coca cola", 2); set("coke zero", 2);☐ set("water bottle", 1.5); set("flamin' hot cheetohs", 2);