CSI 33 Chapter 10 review questions (Lectures 20 & 21)

**1.** Review **C++ pointers, dynamic memory allocation,** and **deallocation**

**2.** Review **C++ Dynamic Arrays, class copy constructor** and **destructor**.

**3.** Review **memory leaks** and **accessing invalid memory**.

**4.** Review **True/False**, **Multiple choice** questions

## Chapter 11 review questions (Lecture 22)

**1.** Review **True/False**, **Multiple choice** questions

**2.** Review **C++ linked list class** we defined

## Chapter 12 review (Lecture 23)

**1.** Review **True/False**, **Multiple choice** questions

**2.** Review **template function** and **template class** definitions.

**3**. Make sure you know how to use a template class.

## Chapter 13 review (Lectures 14, 23 & 24)

**0.** All the code in this chapter was written in Python.

**1.** Review definition of a **heap**. Code of the Heap class. Review insertion and deletion methods. Know run-time efficiency of its methods.

**2.** Review definition of the **priority queue** and how priority queue might be implemented. I'm not asking about run-time efficiency for priority queue's methods.

**3.** Review **AVL trees** (including AVL property and the code in Python). Make sure you know how to insert a value into an AVL tree and how to re-balance an AVL tree, if after insertion the AVL property is violated. Note that we did not define deletion for an AVL tree.

**4.** Review **Hash tables** and **collision resolution**. Note that we didn't see the code for this part of the Section.

**5.** Review **True/False**, **Multiple choice** questions

**6.** See Short Answer questions (page 481)