

CS 150: Intro to OOP, Fall 2008

Programming Assignment 2

Due *via email* by 11:59pm on October 13, 2008

For this assignment, you must work individually. As usual, you are welcome to discuss *general* python syntax, but your design and coding should all be done individually. Please refer to the class syllabus or consult the instructor if you have any questions.

1. (15 points each) Exercises 6.15 and 6.16

Please include both class definitions (one for 6.15 and one for 6.16) in the same .py file. Make sure to use comments and meaningful variable names. Also, remember to test your implementation before submitting the file!

2. (2 points per part) Extra credit: Create a new class `ExtendedSortedSet` which contains the functionality of 6.16 but also has the following functionality:
 - (a) Implement an `__add__` function (overloading `+`) which takes two sets and returns the union of them in a new set.
 - (b) Implement an `__eq__` function (overloading `==`) which take two sets and returns `True` if the sets are the same.
 - (c) Implement an `xor(self, other)` function, which will be called by `set1.xor(set2)`. The function should return all elements which are either in `set1` or in `set2` (but NOT in both).