

CISC275 Spring 2018: Sets and Equality

NOTE: As you do this exercise, focus on **understanding** every piece of code you write. Copying code examples without understanding leads to ugly code and bad exam grades.

NOTE2: Today's exercise is disposable. Make everything public and do not write any methods you don't absolutely need.

1. Write a Cat1 class (a cat has a name). Write a toString() method for this class.
2. Create a HashSet of cats and put three cats in it (Fido, Phideaux, Fido).
3. Write a Cat2 class (how to do this quickly?) such that when two Cat2 items are placed in a set, if they share a name then only one will appear. Hint: You will need to write at least one more Cat2 method to make this work.
4. Create two sets of Cat2. Demonstrate union and intersection in the Java paradigm (hint: no loops or iterators).

Study Questions: What methods did you write? When did they get called? In what order? When did they *not* get called?