Comparator

* Four Method underlie many of Javas important Collection types: equals, Compare and CompareTo and hashCode
  + To Put your own objects into a Collection, you need to ensure that these methods are defines properly.
  + Any Collection with some sort of membership test uses equals
  + Note switch too early
* The object class provides public Boolean equals\*Object obj) and public int hashCode
* Implementing
  + Note switch
* Using a separate Comparator
  + Student implements Comparable
  + Therefore it had a compareTo method
  + We could sort students only by their score
  + If we wanted to sort stidents another way, like by name we are SOL
* Now we will put the comparison methos in a sperarate class that implements Comparator
  + This is more flexible
  + Note switch
* The compare method
* Comparator.equals
  + Ignore this methos
    - IS not used to compare two Students, it is used to compare two Comparators
    - You don’t need to override it due to object inheritance
* When to use each
  + The Comparable Interface is simpler and less work
    - Your Class implements Note FUCKING SWITCH