

Chapter 13 Project

Create a class that implements the comparable interface. Generate random attributes to populate/create instances of the class and store them in an ArrayList (Minimum of 50 instances of the class). Create a sort class that has a Quicksort and a Mergesort method. Print the contents of the unsorted array and then implement the mergesort method first being careful not to alter the original array. Next, reprint the new arraylist in sorted order. Now, do the same for quicksort.

Classes and Instance Variables

- 1) Airplane (If last name begins with letter: a,b,c,d,e,f,g,h,i)
 - a) Wing-span
 - b) Number of engines
 - c) Number of passengers
 - d) Color
 - e) Model
 - f) Accessory pack (Premium, Standard, Discount)

- 2) Bikes (If last name begins with letter: J,k,L,m,n,o,p,q)
 - a) Brand Name
 - b) Number of gears
 - c) Color
 - d) Rim size,
 - e) Type of metal
 - f) Accessory pack (Premium, Standard, Discount)

- 3) Motorcycles (If last name begins with letter: r,s,t,u,v,w,x,y,z)
 - a) Make
 - b) Engine size
 - c) Rim size
 - d) Color
 - e) Number cylinders
 - f) Accessory pack (Premium, Standard, Discount)