121 Discussion #3 9/29/05

Announcements:
Ch4 will be up today. Read it, do hwk,
Third programming assignment up soon.
Office hours for TAs now posted
Honors section first mtg: 11:15 AM Friday (9/23). Room: CS
BLDG 142
Captive Lab session: TBA

You can log into OWL directly here: owl.oit.umass.edu/

Programming Assigment 2 collection instructions: on the
website very soon

1. What’s the difference in Java between (5+6)/2 and
   (5+6)/2.0
2. Discuss each of these statement pairs:
   String s = “dog”; charAt(2);
   String s = “dog”; s.charAt(2);
   String s = “dog”; s.charAt(3);

3. Here’s the TubTester class:
   public class TubTester{
     public static void main(String[] args){
       System.out.println("his & hers tubs in house: ");
       BathTub b= new BathTub("king", 60);
       BathTub t = new BathTub("queen", 70);
       System.out.println("Total water capacity: " + (b.getCapacity() +
                       t.getCapacity()));
       System.out.println("total water weight of larger: " + t.totalWt());
     }
   }

What class does TubTester make use of?
What do you think its instance variables are, and what are there types?
Can you write its constructor?
What methods should the class have?
4. Here is the BookshelfDriver class. From this, create the BookShelf class
public class BookShelfDriver{

   public static void main(String[] args){
      BookShelf b = new BookShelf("wood", 3, 42);
      System.out.println("kind: " + b.getKind());
      System.out.println("shelves: " + b.getShelfCount());
      System.out.println("width: " + b.getWidth());
   }
}

5. Here is the UnionMemberDriver class. From this, create a UnionMember class
public class UnionMemberDriver{

   public static void main(String[] args){
      UnionMember m = new UnionMember("jack", 17, true);
      System.out.println("name: " + m.getName());
      System.out.println("member years: " + m.getYears());
      System.out.println("dues paid?: " + m.getStatus());
   }
}

6. I want to construct a House class. The characteristics of a house I want to model
are: is it owner-occupied?; who is the owner?; What fraction of an acre does the
house sit on; and its assessed value. Note that all but the third of these
characteristics may change over time. Write the class, then write a driver class to
make sure everything is going to work properly.