LAB 3

1. Prob 1:
   * In the code folder for this lab there is a package lesson3.labs.prob1 containing two classes, Person and PersonWithJob. In each class, the equals method has been overridden. Run the main method in the PersonWithJob class. In the main method, two instances of Person have been compared to determine if they are equal. The comparison is done in two different ways. One way leads to a “false”, the other to a “true.” Explain why this has happened. Then provide a solution by replacing inheritance with composition.
     + Explain:
       - System.out.println("p1.equals(p2)? " + p1.equals(p2)); // false,   
           
         because p2 is an instance of Person, it is not instance of PersonWithJob. Whereas, p1 is an instance of PersonWithJob. That’s why p1 is not equal to p2 in this comparation.
       - System.out.println("p2.equals(p1)? " + p2.equals(p1)); // true,  
           
         because both instances p1 and p2 are instance of Person.
2. Prob 2:
   * Design as below image:

A diagram of a building

Description automatically generated

1. Prob 3:
   * Design as below image:

A diagram of a computer

Description automatically generated