Task 1:

Create an interface named PersonInterface which have two method computeTotalWealth() which has return type int and getName() which has return type String.

Create a class person which implements the PersonInterface. This class has four private variables: int cashSaving, int retirementFund, String firstName and String lastName. Set the values of these parameter in a constructor. The method computerTotalWealth return the total wealth of a person which is the sum of cashSaving and retirementFund and the method getName return the full name of the person.

Create a main class. Create an object of person class and print the total wealth and name. You can assign the object instance to PersonInterface type e.g. PersonInterface personinterface1 = person1. Print the total wealth and name using personinterface1 object. Check of object instance that is referred by person1 and personinterface1 is the same object instance.

Hint: boolean b1 = (person1 == personinterface1);
System.out.println("Do person1 and personinterface1 point to the same object instance? " + b1);

Create an object instance of Person class and assign it to the interface type directly e.g. PersonInterface personinterface2 = new Person(3000, 4000, "Dadu", "Daniel"). Print total wealth name using this object.

Task2

Create a class address which have following attributes:

- private String name
- private String street
- private String city
- private String state
- private String code

Set these attributes using constructor and have a toString method.

Create another class named maillist which is a driver class. Create a LinkedList in the class and add these three addresses:

- "A", "11 Ave", "U", "IL", "11111"
- "R", "11 Lane", "M", "IL", "22222"
- "T", "8 St", "C", "IL", "33333"

Using a loop or iterator print the details of the each of the object in the maillist.

Task 3

Define a Pair class to hold pairs of "stuff". Pair can be of integer string or any other datatype. Use Generic to implement this. Pair will have private two attributes first and second which are set through constructor and access through getters. In the main method create two generic list of pair ps and pd. Ps contains pair of string and pd contain pair of double. Create another class named DisparatePair which contains mixed pair e.g. one element in pair is string and other is integer. In main method create list named p and pass 1.3 and 3. Print the elements of the list using get methods.