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@author: Chanpreet

@application: using setter and getter methods for instance variables

@date: 8 March,2023

@time:4.00 pm

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public class BankTransactionRecord

{

    boolean canadianFunds;

    double exchangeRate;

    int transactionNumber;

    long transactionReferenceNumber;

public BankTransactionRecord(boolean canadianFunds, double exchangeRate, int transactionNumber, long transactionReferenceNumber)

{

    this.canadianFunds= canadianFunds;

    this.exchangeRate= exchangeRate;

    this.transactionNumber= transactionNumber;

    this.transactionReferenceNumber= transactionReferenceNumber;

}

public void setcanadianFunds(boolean canadianFunds)

{

    this.canadianFunds= canadianFunds;

}

public boolean getcanadianFunds()

{

    return canadianFunds;

}

public void setexchangeRate(double exchangeRate)

{

     this.exchangeRate= exchangeRate;

}

public double getexchangeRate()

{

    return exchangeRate;

}

public void settransactionNumber(int transactionNumber)

{

     this.transactionNumber= transactionNumber;

}

public int gettransactionNumber()

{

    return transactionNumber;

}

public void settransactionReferenceNumber(long transactionReferenceNumber)

{

    this.transactionReferenceNumber= transactionReferenceNumber;

}

public long gettransactionReferenceNumber()

{

    return transactionReferenceNumber;

}

}

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@author: Chanpreet

@application: printing data using instance variables

@date: 8 March,2023

@time:4.30 pm

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import java.util.Random;

import java.util.Scanner;

public class BankTransactionRecordTestHarness

{

    public static void main(String[] args)

    {

        Random rand = new Random();

        BankTransactionRecord[] r1= new BankTransactionRecord[500];

         boolean canadianFunds = rand.nextBoolean();

         double exchangeRate=  rand.nextDouble();

         int transactionNumber=  rand.nextInt();

          long transactionReferenceNumber=  rand.nextLong();

          for(int i=0; i<500; i++)

          {

          System.out.println(r1[i].getcanadianFunds());

          System.out.println("----------------------------------------------------");

          System.out.println(r1[i].getexchangeRate());

          System.out.println("----------------------------------------------------");

          System.out.println(r1[i].gettransactionNumber());

          System.out.println("----------------------------------------------------");

          System.out.println(r1[i].gettransactionReferenceNumber());

          System.out.println("----------------------------------------------------");

          }

          Scanner obj= new Scanner(System.in);

          int phaseTwo = obj.nextInt();

          System.out.println("Enter phase two of the test: " +phaseTwo);

          if(phaseTwo==0)

          {

          }

          if(phaseTwo==1)

          {

            for(int i=0; i<500; i++)

          {

             r1[i].setcanadianFunds(false);

            r1[i].setexchangeRate(1.25);

            r1[i].settransactionNumber(12345);

            r1[i].settransactionReferenceNumber(999888777111333L);

          System.out.println(r1[i].getcanadianFunds());

          System.out.println("----------------------------------------------------");

          System.out.println(r1[i].getexchangeRate());

          System.out.println("----------------------------------------------------");

          System.out.println(r1[i].gettransactionNumber());

          System.out.println("----------------------------------------------------");

          System.out.println(r1[i].gettransactionReferenceNumber());

          System.out.println("----------------------------------------------------");

          }

    }

}

}