//business

package Calculator;

import java.text.NumberFormat;

public class Calculator

{

private double monthlyInvestment;

private double yearlyInterestRate;

private int year;

private double futureValue;

private int i;

private int months;

double monthlyInterestAmount;

public Calculator()

{

monthlyInvestment=0;

yearlyInterestRate = 0;

year = 0;

futureValue =0;

i =1;

months = 0;

monthlyInterestAmount=0;

}

public void setmonthlyInvestment(double monthlyInvestment)

{

this.monthlyInvestment=monthlyInvestment;

}

public double getmonthlyInvestment()

{

return monthlyInvestment;

}

public void setyearlyInterestRate(double yearlyInterestRate)

{

this.yearlyInterestRate=yearlyInterestRate;

}

public double getyearlyInterestRate()

{

return yearlyInterestRate;

}

public void setyear(int year)

{

this.year=year;

months = year\*12;

}

public double year()

{

return year;

}

public void setfutureValue(double futureValue)

{

this.futureValue = futureValue;

}

public double getfutureValue()

{

return futureValue;

}

public double monthlyInterestRate()

{

return yearlyInterestRate/12/100;

}

public double futureValue()

{

while(i<=months)

{

futureValue=futureValue+monthlyInvestment;

monthlyInterestAmount = futureValue\*monthlyInterestRate();

futureValue = futureValue+monthlyInterestAmount;

i+=1;

}

return futureValue;

};

public void PrintToConsole()

{

System.out.println("Future Value: "+NumberFormat.getCurrencyInstance().format(futureValue()));

System.out.println();

}

}

//App

package Calculator;

import java.util.Scanner;

import java.text.NumberFormat;

public class CalculatorAPP

{

public static void main(String[] args)

{

System.out.println("Welcome to the Future Value Calculator");

System.out.println();

Scanner sc = new Scanner(System.in);

String choice = "y";

while(choice.equalsIgnoreCase("y"))

{

System.out.print("Enter monthly investment");

double monthlyInvestment = Double.parseDouble(sc.nextLine());

System.out.print("Enter yearly interest Rate");

double yearlyInterestRate = Double.parseDouble(sc.nextLine());

System.out.println("Enter numbers of year");

int year = Integer.parseInt(sc.nextLine());

Calculator calculator = CalculatorDB.getCalculatorDB(monthlyInvestment, yearlyInterestRate, year);

calculator.PrintToConsole();

System.out.println("Continue?(y/n): ");

choice= sc.next();

System.out.println();

}

System.out.println("Bye");

}

}

//database

package Calculator;

public class CalculatorDB

{

public static Calculator getCalculatorDB(double monthlyInvestment,double yearlyInterestRate,int year)

{

Calculator calculator = new Calculator();

calculator.setyearlyInterestRate(yearlyInterestRate);

calculator.setmonthlyInvestment(monthlyInvestment);

calculator.setyear(year);

return calculator;

}

}