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public class Stock {

// create private viriables

private String symbol;

private String name;

private double previousClosingPrice;

private double currentPrice;

// constructor that creates a stock with a specified symbol and name

public Stock( String newSymbol, String newName )

{

symbol = newSymbol;

name = newName;

}

// accessor methods

public String getSymbol()

{

return symbol;

}

public String getName()

{

return name;

}

public double getPrevClosingPrice()

{

return previousClosingPrice;

}

public double getCurrentPrice()

{

return currentPrice;

}

// mutator methods

public void setPrevClosingPrice( double pcp)

{

previousClosingPrice = pcp;

}

public void setCurrentPrice( double cp )

{

currentPrice = cp;

}

// percentage changed from previousClosingPrice to currentPrice

public double changePercent()

{

return ( currentPrice - previousClosingPrice ) / previousClosingPrice;

}

}

import java.text.DecimalFormat;

public class StockTest {

public static void main( String [] args )

{

// instantiate the Stock object

Stock appleStock = new Stock( "AAPL", "Apple" );

// set the previous closing price and current price of the appleStock object

appleStock.setPrevClosingPrice( 220.6 );

appleStock.setCurrentPrice( 150 );

// instantiate the DecimalFormat object.

DecimalFormat percentFormat = new DecimalFormat( "0.00%" );

// print the information of the stock

System.out.println( "Stock name: " + appleStock.getName()

+ "\nStock symbol: " + appleStock.getSymbol()

+ "\nPrevious closing price: " + appleStock.getPrevClosingPrice() + " USD"

+ "\nCurrent price: " + appleStock.getCurrentPrice() + " USD");

// conver the change to percentate format and print out.

System.out.println( "Change percentage: " + percentFormat.format( appleStock.changePercent() ) );

}

}

