package stock\_program;

/\*\*

\*

\* @author gawitt

\*/

public class Stock\_Client {

public static void main(String[] args) {

Stock apple = new Stock("Apple","AAPL",100,132.04,500);

apple.display();

Stock ford = new Stock("Ford","F",15,12.38,300);

ford.display();

Stock homedepot = new Stock("The Home Depot","HD",140,141.68,200);

homedepot.display();

Stock honda = new Stock("Honda Motor Company","HMC",45,35.50,100);

honda.display();

Stock volkswagen = new Stock("Volkswagen","VO3",120.75,143.60,25);

volkswagen.display();

Stock amazon = new Stock("Amazon.com Inc","AMZN",400,844.14,68);

amazon.display();

Stock target = new Stock("Target Corporation","TGT",62.00,65.20,89);

target.display();

double sum = apple.CalcCurrentValue() + ford.CalcCurrentValue() + homedepot.CalcCurrentValue() +

honda.CalcCurrentValue() + volkswagen.CalcCurrentValue() + amazon.CalcCurrentValue() + target.CalcCurrentValue();

System.out.printf("Total Value of all Shares:\n %6.2f\n"

, sum);

}//main

}//client

Stock Class Object:

package stock\_program;

/\*\*

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\* @author gawitt

\*/

public class Stock {

// Attributes

private String name;

private String symbol;

private double boughtPrice;

private double currentPrice;

private double shares;

private static int numberOfStocks = 0; // class variable

// Constructors

Stock(){

numberOfStocks++;

}//no argument constructor

Stock(String a, String b){

name = a;

symbol = b;

numberOfStocks++;

}// two argument constructor

Stock(String a, String b,double c, double d,double e){

name = a;

symbol = b;

boughtPrice = c;

currentPrice = d;

shares = e;

numberOfStocks++;

} // all 5 arguments

public double CalcCurrentValue(){

return shares \* currentPrice;

}// CalcCurrentValue Method

public double calcDollarReturn(){

return (shares \* (currentPrice - boughtPrice));

}//Dollar

public double calPercentReturn(){

return ((currentPrice - boughtPrice) / boughtPrice);

}// calPercent Method

public void display(){

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

System.out.println("\n Stock: " + name + "\n");

System.out.printf(" Shares :%6.2f\n", shares );

System.out.printf(" Bought at :%6.2f\n", boughtPrice);

System.out.printf(" Current Price :%6.2f\n", currentPrice);

System.out.printf(" Value :%6.2f\n", CalcCurrentValue());

System.out.printf(" Dollar return :%6.2f\n", calcDollarReturn());

System.out.printf(" Percent :%6.2f\n", calPercentReturn());

System.out.println("Number of Stocks in Portfolio: " + numberOfStocks);

System.out.println("");

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

}//display

public String getName(){

return name;

}// getter for name

public void setName(String name){

this.name = name;

}// get

@Override

public String toString(){

return name + " " + symbol;

}// to String

}//Stock

Runtime:

run:

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Stock: Apple

Shares :500.00

Bought at :100.00

Current Price :132.04

Value :66020.00

Dollar return :16020.00

Percent : 0.32

number of stocks in portfolio: 1

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Stock: Ford

Shares :300.00

Bought at : 15.00

Current Price : 12.38

Value :3714.00

Dollar return :-786.00

Percent : -0.17

number of stocks in portfolio: 2

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Stock: The Home Depot

Shares :200.00

Bought at :140.00

Current Price :141.68

Value :28336.00

Dollar return :336.00

Percent : 0.01

number of stocks in portfolio: 3

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Stock: Honda Motor Company

Shares :100.00

Bought at : 45.00

Current Price : 35.50

Value :3550.00

Dollar return :-950.00

Percent : -0.21

number of stocks in portfolio: 4

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Stock: Volkswagen

Shares : 25.00

Bought at :120.75

Current Price :143.60

Value :3590.00

Dollar return :571.25

Percent : 0.19

number of stocks in portfolio: 5

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Stock: Amazon.com Inc

Shares : 68.00

Bought at :400.00

Current Price :844.14

Value :57401.52

Dollar return :30201.52

Percent : 1.11

number of stocks in portfolio: 6

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Stock: Target Corporation

Shares : 89.00

Bought at : 62.00

Current Price : 65.20

Value :5802.80

Dollar return :284.80

Percent : 0.05

number of stocks in portfolio: 7

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Total Value of all Shares:

168414.32

BUILD SUCCESSFUL (total time: 0 seconds)