**package** lab8b;

**public** **class** BuyStockCommand **implements** ICommand{

Stock stock;

**public** BuyStockCommand(Stock stock) {

**super**();

**this**.stock = stock;

}

@Override

**public** **void** execute(**int** number) {

// **TODO** Auto-generated method stub

System.***out***.println("Buying stock...");

stock.buy(number);

}

}

**package** lab8b;

@FunctionalInterface

**public** **interface** ICommand {

**public** **void** execute(**int** number);

}

package lab8b;

import java.util.ArrayList;

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

// TODO Auto-generated method stub

int choice = 0;

Scanner in = new Scanner(System.in);

ArrayList<Stock> allStocks = new ArrayList<>();

StockAutomation stockAuto = new StockAutomation();

while(choice < 3) {

System.out.println("Welcome to the stock market!");

System.out.println("What would you like to do?");

System.out.println("Hit 1 for buy, 2 for sell, 3 to quit");

choice = in.nextInt();

switch(choice) {

case 1 : {

System.out.println("What's the name of the stock?");

String name = in.next();

System.out.println("How much does it cost?");

double price = in.nextDouble();

System.out.println("How many stocks?");

int quant = in.nextInt();

Stock stock = new Stock(name, price);

stockAuto.setCommand(new BuyStockCommand(stock));;

stockAuto.buttonPressed(quant);

break;

}

case 2 : {

System.out.println("Whats the name of the stock?");

String name = in.next();

System.out.println("How much does it cost?");

double price = in.nextDouble();

System.out.println("How many stocks?");

int quant = in.nextInt();

Stock stock = new Stock(name, price);

stockAuto.setCommand(new SellStockCommand(stock));;

stockAuto.buttonPressed(quant);

break;

}

default : {

System.out.println("Thank you! See you again!");

break;

}

}

}

}

}

**package** lab8b;

**public** **class** SellStockCommand **implements** ICommand{

Stock stock;

**public** SellStockCommand(Stock stock) {

**super**();

**this**.stock = stock;

}

@Override

**public** **void** execute(**int** number) {

// **TODO** Auto-generated method stub

System.***out***.println("Selling stock...");

stock.sell(number);

}

}

**package** lab8b;

**public** **class** Stock {

**private** String name;

**private** **double** price;

**public** Stock(String name, **double** price) {

**this**.name = name;

**this**.price = price;

}

**public** **void** buy(**int** quantity){

System.***out***.println("BOUGHT: " + quantity + "x " + **this**);

}

**public** **void** sell(**int** quantity){

System.***out***.println("SOLD: " + quantity + "x " + **this**);

}

**public** String toString() {

**return** "Product [name=" + name + ", price=" + price + "]";

}

}

**package** lab8b;

**public** **class** StockAutomation {

ICommand command;

**public** **void** setCommand(ICommand command) {

**this**.command = command;

}

**public** **void** buttonPressed(**int** numOfStock) {

command.execute(numOfStock);

}

}