import java.util.\*;

class Stock {

String name;

double price;

Stock(String name, double price) {

this.name = name;

this.price = price;

}

}

class Portfolio {

Map<String, Integer> stocks = new HashMap<>();

double balance = 10000.0;

void buyStock(Stock stock, int quantity) {

double totalPrice = stock.price \* quantity;

if (balance >= totalPrice) {

balance -= totalPrice;

stocks.put(stock.name, stocks.getOrDefault(stock.name, 0) + quantity);

System.out.println("Bought " + quantity + " shares of " + stock.name);

} else {

System.out.println("Insufficient balance.");

}

}

void sellStock(Stock stock, int quantity) {

int owned = stocks.getOrDefault(stock.name, 0);

if (owned >= quantity) {

balance += stock.price \* quantity;

stocks.put(stock.name, owned - quantity);

System.out.println("Sold " + quantity + " shares of " + stock.name);

} else {

System.out.println("Not enough shares to sell.");

}

}

void showPortfolio() {

System.out.println("\n--- Portfolio ---");

for (Map.Entry<String, Integer> entry : stocks.entrySet()) {

System.out.println(entry.getKey() + ": " + entry.getValue() + " shares");

}

System.out.println("Available Balance: $" + balance);

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

}

}

public class StockTradingPlatform {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

Portfolio portfolio = new Portfolio();

List<Stock> stockMarket = Arrays.asList(

new Stock("AAPL", 180.5),

new Stock("GOOGL", 2650.0),

new Stock("TSLA", 720.75),

new Stock("AMZN", 3300.25)

);

int choice;

do {

System.out.println("\n=== Stock Trading Platform ===");

System.out.println("1. View Stocks");

System.out.println("2. Buy Stock");

System.out.println("3. Sell Stock");

System.out.println("4. View Portfolio");

System.out.println("0. Exit");

System.out.print("Enter your choice: ");

choice = sc.nextInt();

switch (choice) {

case 1:

System.out.println("\nAvailable Stocks:");

for (int i = 0; i < stockMarket.size(); i++) {

Stock stock = stockMarket.get(i);

System.out.println((i + 1) + ". " + stock.name + " - $" + stock.price);

}

break;

case 2:

System.out.print("Enter stock number to buy: ");

int buyIndex = sc.nextInt() - 1;

if (buyIndex >= 0 && buyIndex < stockMarket.size()) {

System.out.print("Enter quantity: ");

int qty = sc.nextInt();

portfolio.buyStock(stockMarket.get(buyIndex), qty);

} else {

System.out.println("Invalid stock choice.");

}

break;

case 3:

System.out.print("Enter stock number to sell: ");

int sellIndex = sc.nextInt() - 1;

if (sellIndex >= 0 && sellIndex < stockMarket.size()) {

System.out.print("Enter quantity: ");

int qty = sc.nextInt();

portfolio.sellStock(stockMarket.get(sellIndex), qty);

} else {

System.ou