**5 lines – Hello World**

**public class Example1 {**

**public static void main(String[] args) {**

**// Print a simple message to the console**

**System.out.println("Hello, Java World!");**

**}**

**}**

**10 lines – Simple Addition**

**public class Example2 {**

**public static void main(String[] args) {**

**// Declare two integer variables**

**int a = 7;**

**int b = 5;**

**// Add the two numbers**

**int sum = a + b;**

**System.out.println("a + b = " + sum);**

**// Multiply the two numbers**

**int product = a \* b;**

**System.out.println("a \* b = " + product);**

**}**

**}**

**15 lines – Using JOptionPane Input**

**import javax.swing.JOptionPane;**

**public class Example3 {**

**public static void main(String[] args) {**

**// Ask user for the first number (input always comes back as String)**

**String input1 = JOptionPane.showInputDialog("Enter first number:");**

**// Ask user for the second number**

**String input2 = JOptionPane.showInputDialog("Enter second number:");**

**// Convert both inputs from String to int**

**int num1 = Integer.parseInt(input1);**

**int num2 = Integer.parseInt(input2);**

**// Add the two numbers**

**int total = num1 + num2;**

**// Show the result in a pop-up dialog**

**JOptionPane.showMessageDialog(null, "Sum = " + total);**

**}**

**}**

**50 lines – Mini Shopping Calculator**

**import javax.swing.JOptionPane;**

**public class Example4 {**

**public static void main(String[] args) {**

**// Keep track of total price**

**double total = 0.0;**

**// Item 1**

**String item1 = JOptionPane.showInputDialog("Enter item 1 name:");**

**double price1 = Double.parseDouble(JOptionPane.showInputDialog("Enter price of " + item1));**

**total += price1; // add to total**

**// Item 2**

**String item2 = JOptionPane.showInputDialog("Enter item 2 name:");**

**double price2 = Double.parseDouble(JOptionPane.showInputDialog("Enter price of " + item2));**

**total += price2;**

**// Item 3**

**String item3 = JOptionPane.showInputDialog("Enter item 3 name:");**

**double price3 = Double.parseDouble(JOptionPane.showInputDialog("Enter price of " + item3));**

**total += price3;**

**// Item 4**

**String item4 = JOptionPane.showInputDialog("Enter item 4 name:");**

**double price4 = Double.parseDouble(JOptionPane.showInputDialog("Enter price of " + item4));**

**total += price4;**

**// Item 5**

**String item5 = JOptionPane.showInputDialog("Enter item 5 name:");**

**double price5 = Double.parseDouble(JOptionPane.showInputDialog("Enter price of " + item5));**

**total += price5;**

**// Build and display the receipt**

**JOptionPane.showMessageDialog(null, "You bought:\n"**

**+ item1 + " - €" + price1 + "\n"**

**+ item2 + " - €" + price2 + "\n"**

**+ item3 + " - €" + price3 + "\n"**

**+ item4 + " - €" + price4 + "\n"**

**+ item5 + " - €" + price5 + "\n\n"**

**+ "Total cost = €" + total);**

**}**

**}**

**100 lines – Full Shopping Cart with Loop & Discount**

**import javax.swing.JOptionPane;**

**import java.util.ArrayList; // Needed for dynamic lists**

**public class ShoppingCalc {**

**public static void main(String[] args) {**

**// Create lists to store item names and prices**

**ArrayList<String> items = new ArrayList<>();**

**ArrayList<Double> prices = new ArrayList<>();**

**// Total cost of all items**

**double total = 0.0;**

**// Ask how many items the user wants to buy**

**int itemCount = Integer.parseInt(**

**JOptionPane.showInputDialog("How many items do you want to buy?")**

**);**

**// Loop through each item and ask for details**

**for (int i = 1; i <= itemCount; i++) {**

**// Ask for item name**

**String item = JOptionPane.showInputDialog("Enter name of item " + i + ":");**

**// Ask for price (convert from String to double)**

**double price = Double.parseDouble(**

**JOptionPane.showInputDialog("Enter price of " + item + ":")**

**);**

**// Store values in lists**

**items.add(item);**

**prices.add(price);**

**// Add price to running total**

**total += price;**

**}**

**// Discount variable**

**double discount = 0.0;**

**// Apply 10% discount if total > 100**

**if (total > 100) {**

**discount = total \* 0.1;**

**total -= discount; // subtract discount from total**

**}**

**// Build the receipt as a text string**

**StringBuilder receipt = new StringBuilder();**

**receipt.append("----- RECEIPT -----\n");**

**// Loop through items and prices to print them**

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

**receipt.append(items.get(i)) // item name**

**.append(" : €") // add currency symbol**

**.append(prices.get(i)) // item price**

**.append("\n"); // new line**

**}**

**// Show discount if applied**

**if (discount > 0) {**

**receipt.append("\nDiscount applied: €").append(discount).append("\n");**

**}**

**// Show the final total**

**receipt.append("\nTOTAL = €").append(total).append("\n");**

**receipt.append("-------------------");**

**// Show everything in a dialog box**

**JOptionPane.showMessageDialog(null, receipt.toString());**

**}**

**}**

**Summary**

* **5 lines** Hello World (console).
* **10 lines** Basic addition/multiplication (console).
* **15 lines** Input/output using JOptionPane.
* **50 lines** Fixed 5-item shopping calculator.
* **100 lines** Full shopping cart with loop, dynamic items, discount, and receipt.