import java.text.NumberFormat;

import java.text.DecimalFormat;

import javax.swing.JOptionPane;

import javax.swing.JTextArea;

import javax.swing.JScrollPane;

import java.util.Date;

import java.text.DateFormat;

**class Cashier{**

//Variables

private static int numberOfItems;

private static double totalSum;

private String name, s;

private double amount, price, tendered, change, dollars, quarters, dimes, nickels, pennies;

NumberFormat nf = NumberFormat.getInstance();

DecimalFormat df = (DecimalFormat)nf;

//Constructor

**public Cashier(){**

this.name = name;

this.price = price;

price = 0;

this.s = "";

}

**public double average(){**

return totalSum/numberOfItems;

}

**public void Add(String name, double price){**

totalSum = totalSum + price;

s = s + name + "........" + price + "\n";

numberOfItems++;

}

**public void tendered(double amount){**

tendered = amount;

}

**public void makeChange(){**

this.tendered = tendered;

change = tendered - totalSum;

change = 100 \* change;

change = Math.round(change);

change = change / 100;

dollars = (int)(tendered - totalSum) \* 100 / 100;

pennies = (int)(change \* 100) % 100;

quarters = (int)pennies / 25;

pennies = (int)pennies % 25;

dimes = (int)pennies / 10;

pennies = (int)pennies % 10;

nickels = (int)pennies / 5;

pennies = (int)pennies % 5;

pennies = (int)pennies;

}

**public String getNames(){**

return s;

}

**public double getPrices(){**

return price;

}

**public double getTotal(){**

return totalSum;

}

**public double getMoney(){**

return tendered;

}

**public double getChange(){**

return tendered - totalSum;

}

**public double getQuantity(){**

return numberOfItems;

}

**public double getAverage(){**

return average();

}

**public double getDollars(){**

return dollars;

}

**public double getQuarters(){**

return quarters;

}

**public double getDimes(){**

return dimes;

}

**public double getNickels(){**

return nickels;

}

**public double getPennies(){**

return pennies;

}

}

**public class TestCashier{**

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

Cashier c = new Cashier();

String name = GetData.getWord("Enter name of item");

double price = GetData.getDouble("Enter price of item");

c.Add(name, price);

name = GetData.getWord("Enter name of item");

price = GetData.getDouble("Enter price of item");

c.Add(name, price);

name = GetData.getWord("Enter name of item");

price = GetData.getDouble("Enter price of item");

c.Add(name, price);

// Add a two more entries of your own

// Now average the price of the items

c.average();

// Make payment

double amount = GetData.getDouble("Enter amount of money for payment");

c.tendered(amount);

c.makeChange();

generateReceipt(c);

}

**static void generateReceipt(Cashier c){**

String r = "Classic Groceries Shop \n";

r = r + "Welcome – thanks for stopping, \n";

DateFormat df = DateFormat.getDateInstance();

Date d = new Date();

NumberFormat f = NumberFormat.getCurrencyInstance();

r = r + "Today is " + df.format(d) + "\n\n";

r = r + c.getNames();

r = r + "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" + "\n";

r = r + "Total " + f.format(c.getTotal()) + "\n\n";

r = r + "There were " + c.getQuantity() + " items" + "\n";

r = r + "The average price is " + f.format(c.getAverage()) + "\n\n";

r = r + "Amount tendered " + f.format(c.getMoney()) + "\n";

r = r + "The change is " + f.format(c.getChange()) + "\n\n";

r = r + "The change includes :" + "\n";

r = r + c.getDollars() + " dollars" + "\n" + c.getQuarters()+ " quarters" + "\n" + c.getDimes()+ " dimes" + "\n" + c.getNickels()+ " nickels" + "\n" + c.getPennies() + " cents";

JTextArea text = new JTextArea(r,15, 25);

JScrollPane pane = new JScrollPane(text);

JOptionPane.showMessageDialog(null,pane, "Your bill", JOptionPane.INFORMATION\_MESSAGE);

}

}

**class GetData{**

static String str;

**static double getDouble(String s){**

str = JOptionPane.showInputDialog(s);

return Double.parseDouble(str);

}

**static int getInt(String s){**

str = JOptionPane.showInputDialog(s);

return Integer.parseInt(str);

}

**static String getWord(String s){**

return JOptionPane.showInputDialog(s);

}

}