

```

import java.io.*;
import java.util.*;
import java.util.jar.JarOutputStream;

public class SalesSplit
{
    /**
     * Prompts for and reads name of file to process.
     * @param in Scanner from which to read
     * @return file name
     */
    private static String getFileName(Scanner in)
    {
        String filename = null;
        System.out.print("Enter file to process: ");
        if (in.hasNext())
        {
            filename = in.next();
        }

        return filename;
    }

    /**
     * Read a sales entry from input Scanner.
     * @param in Scanner from which to read entry
     */
    private static Sale readSaleEntry(Scanner in)
    {
        String inputLine = in.nextLine();
        Scanner lineScan = new Scanner(inputLine);
        lineScan.useDelimiter(";");
        //YOUR CODE TO INPUT name, service, amount, and date.
        int i = 0;
        String name = ""; String service=""; double amount=0; String date="";
        while(lineScan.hasNext()){
            String value=lineScan.next();
            if(i%4==0) {
                name=value;
            }
            else if(i%4==1) {
                service=value;
            }
            else if(i%4==2) {
                amount=Double.parseDouble(value);
            }
            else if(i%4==3) {
                date=value;
            }
            i++;
        }
        Sale return_sale = new Sale(name, service, amount, date);
        return return_sale;
    }
}

```

```

/**
 * Reads sales data from the specified file.
 * @param filename name of sales data file
 */
private static ArrayList<Sale> readSalesFile(String filename) throws FileNotFoundException
{
    ArrayList<Sale> sales = new ArrayList<Sale>();

    if (filename != null)
    {
        try (Scanner infile = new Scanner(new File(filename)))
        {
            while (infile.hasNext()){
                sales.add(readSaleEntry(infile));
            }
        }
        catch (IllegalArgumentException e)
        {
            System.out.println("File format not valid.");
        }
    }

    return sales;
}

```

```

/**
 * Writes sale to writer.
 * @param out PrintWriter to which sale is written
 * @param sale sale information
 */
private static void writeSale(PrintWriter out, Sale sale)
{
    out.print(sale.getName());
    out.print(";");
    out.print(sale.getServiceCategory());
    out.print(";");
    out.print(sale.getAmount());
    out.print(";");
    out.print(sale.getDate());
    out.println();
}

```

```

public static void main(String[] args)
{
    Scanner in = new Scanner(System.in);
    String filename = getFileName(in);
    System.out.println("The filename is: " + filename);

    try
    {
        PrintWriter sales_output = new PrintWriter("salesoutput.txt");
        ArrayList<Sale> sales = readSalesFile(filename);
        for (Sale s : sales) {

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        System.out.println(s);
        writeSale(sales_output, s);
    }
    sales_output.close();

}

catch (FileNotFoundException e)
{
    System.out.println("File not found!");
}

catch (NoSuchElementException e)
{
    System.out.println("File format not valid.");
}
}
}
}

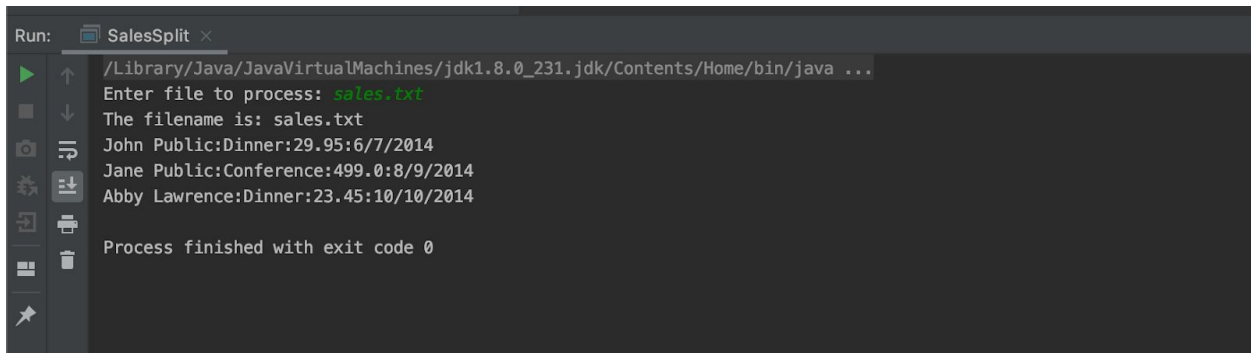
```

Sales Output.txt

John Public;Dinner;29.95;6/7/2014

Jane Public;Conference;499.0;8/9/2014

Abby Lawrence;Dinner;23.45;10/10/2014



```

Run: SalesSplit x
/Library/Java/JavaVirtualMachines/jdk1.8.0_231.jdk/Contents/Home/bin/java ...
Enter file to process: sales.txt
The filename is: sales.txt
John Public:Dinner:29.95:6/7/2014
Jane Public:Conference:499.0:8/9/2014
Abby Lawrence:Dinner:23.45:10/10/2014

Process finished with exit code 0

```