

```

import java.io.*;

//////////////////////////////////////////////////////////////////
//                                                                    //
// The following program takes in integers from a source file and then //
// separates the even and odd integers into corresponding files and    //
// returns the total number of integers, the number of odd integers,  //
// the number of even integers, and the sum of the odd and even integers. //
//                                                                    //
//                               WRITTEN BY:                            //
//                               ALAIN DADAIAN                         //
//                                                                    //
//////////////////////////////////////////////////////////////////

class Splitter
{
    private String inFileName, oddFileName, evenFileName;
    private static int counter = 0, oddCounter = 0, evenCounter = 0;
    private static int totalOdd = 0, totalEven = 0, totalIntegers = 0;

    //-----
    // This is the Splitter constructor. It takes in three arguments,
    // inFileName, oddFileName, and evenFilename all of type String,
    // and returns nothing. The inFileName is the file to be read as
    // the source of the integers. The oddFilename and evenFileName
    // are the files where the odd and even numbers are printed to
    // respectively.
    //-----
    public Splitter (String inFileName, String oddFileName, String evenFileName)
    {
        this.inFileName = inFileName;
        this.oddFileName = oddFileName;
        this.evenFileName = evenFileName;
    }

    //-----
    // The read method reads the integers from a file and sorts out
    // the even integers from the odd integers and puts them into
    // their corresponding files. It also counts the number of
    // integers, odd integers, and even integers from a file. Lastly
    // it also adds together the odd integers and stores the value in
    // totalodd and adds together the even integers and stores the
    // value in totaleven.
    //-----
    public void read () throws Exception
    {
        String line;
        int num;

        PrintStream oddPs = new PrintStream(
            new FileOutputStream(
                new File(oddFileName)));

        PrintStream evenPs = new PrintStream(
            new FileOutputStream(
                new File(evenFileName)));

        BufferedReader br = new BufferedReader(
            new InputStreamReader(
                new FileInputStream(
                    new File(inFileName))));

        int i = 1;
        line = br.readLine();

        while (line != null)
        {
            if (line.equals(""))
            {
                line = br.readLine();
            }
            else
            {
                num = Integer.parseInt(line);

                if (Math.abs(num) % 2 == 0)
                {
                    evenPs.println(line);
                    evenCounter++;
                    totalEven += num;
                }
            }
        }
    }
}

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        }
        else
        {
            oddPs.println(line);
            oddCounter++;
            totalOdd += num;
        }

        totalIntegers++;

        line = br.readLine();
    }
}

//-----
// Returns the total number of integers read from a file.
//-----
public static int getNIntegers()
{
    return totalIntegers;
}

//-----
// Returns the number of odd integers read from a file.
//-----
public static int getNOddIntegers()
{
    return oddCounter;
}

//-----
// Returns the number of odd integers read from a file.
//-----
public static int getNEvenIntegers()
{
    return evenCounter;
}

//-----
// Returns the total sum of all odd integers read from a file.
//-----
public static int getTotalOddIntegers()
{
    return totalOdd;
}

//-----
// Returns the total sum of all even integers read from a file.
//-----
public static int getTotalEvenIntegers()
{
    return totalEven;
}

//-----
} // end of class Splitter

////////////////////////////////////

class Hw03
{
    public static void main(String[] args) throws Exception
    {
        String inFileName, oddFileName, evenFileName;

        BufferedReader br2 = new BufferedReader(new InputStreamReader(System.in));

        System.out.println("Written by Alain Dadaian");

        System.out.print("Input File? ");
        inFileName = br2.readLine();

        System.out.print("File for odd integers? ");
        oddFileName = br2.readLine();

        System.out.print("File for even integers? ");
        evenFileName = br2.readLine();
    }
}

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```
Splitter s = new Splitter(inFileName, oddFileName, evenFileName);
s.read();

System.out.println("Number of integers processed: " + Splitter.getNIntegers());
System.out.println("Number of odd integers: " + Splitter.getNOddIntegers());
System.out.println("Number of even integers: " + Splitter.getNEvenIntegers());
System.out.println("Total of odd integers: " + Splitter.getTotalOddIntegers());
System.out.println("Total of even integers: " + Splitter.getTotalEvenIntegers());

}
} // end of class Hw03

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
```