

CS163/164: File Write Worksheet SOLUTION

Name(s): _____

Consider the FileWriteApp class defined below to implement the FileWriteWorksheet class.

```

import java.io.File;
import java.io.IOException;
import java.util.ArrayList;
import java.util.Scanner;

public class FileWriteApp {
    public static void main(String args[]){
        try{
            FileWriteWorksheet fw = new FileWriteWorksheet("reports.txt");
            ArrayList<Integer> list = readIntegers("numbers.txt");
            fw.writeSumEvenNumbers(list);
            fw.writeNumbersWithOccurrences(list);
            fw.close();
        }catch(IOException e){
            System.out.println(e.getStackTrace());
        }

    }

    public static ArrayList<Integer> readIntegers(String fileName) throws
IOException {
        ArrayList<Integer> list = new ArrayList<Integer>();
        Scanner file = new Scanner(new File(fileName));
        while(file.hasNext()){
            list.add(Integer.parseInt(file.next()));
        }
        return list;
    }
}

```

```

import java.io.FileOutputStream;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.ArrayList;

public class FileWorksheetSolution {
    private PrintWriter file;

    public FileWorksheetSolution(String fileName) throws IOException {
        //create the object file using FileOutputStream
        file = new PrintWriter(new FileOutputStream(fileName));
    }

    public void close(){
        file.close();
    }

    public void writeSumEvenNumbers(ArrayList<Integer> list){
        int sum = 0;
        for(int i = 0; i < list.size(); i++){
            if(list.get(i)%2 == 0) sum+= list.get(i);
        }
        file.println("Sum: " + sum);
    }

    public void writeNumbersWithOccurrences(ArrayList<Integer> list){
        for(Integer i: list){
            int count = occurrence(i, list);

```

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```
        file.println(i + ":" + count);
    }
}
private int occurrence(int number, ArrayList<Integer> list){
    int count = 0;
    for(Integer num: list){
        if(number == num)
            count++;
    }
    return count;
}
}
```