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○ BJP4 Exercise 6.7: flipLines

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Language/Type:  Java [file processing Scanner](#)
Author: Whitaker Brand (on 2016/09/08)

Write a method named `flipLines` that accepts as its parameter a `Scanner` for an input file and that writes to the console the same file's contents with successive pairs of lines reversed in order. For example, if the input file contains the following text:

```
Twas brillig and the slithy toves
did gyre and gimbale in the wabe.
All mimsey were the borogroves,
and the mome raths outgrabe.

"Beware the Jabberwock, my son,
the jaws that bite, the claws that catch,
Beware the JubJub bird and shun
the frumious bandersnatch."
```

The program should print the first pair of lines in reverse order, then the second pair in reverse order, then the third pair in reverse order, and so on. Therefore your method should produce the following output to the console:

```
did gyre and gimbale in the wabe.
Twas brillig and the slithy toves
and the mome raths outgrabe.
All mimsey were the borogroves,
"Beware the Jabberwock, my son,

Beware the JubJub bird and shun
the jaws that bite, the claws that catch,
the frumious bandersnatch."
```

Notice that a line can be blank, as in the third pair. Also notice that an input file can have an odd number of lines, as in the one above, in which case the last line is printed in its original position. You may not make any assumptions about how many lines are in the `Scanner`.

Type your solution here:

```
1 public static void flipLines(Scanner input) {
2     String line1 = "", line2 = "";
3     while(input.hasNextLine()) {
4         line1 = input.nextLine();
5         if (input.hasNextLine()) {
6             line2 = input.nextLine();
7             System.out.println(line2);
8             System.out.println(line1);
9         }
10        else {
11            System.out.println(line1);
12        }
13    }
14 }
```

This is a **method problem**. Write a Java method as described. Do not write a complete program or class; just the method(s) above.



4

Indent

**Submit**

- ☒ Sound F/X
- ☒ Highlighting

✔ You passed 2 of 2 tests.

[Go to the next problem: doubleSpace](#)

test #1: easy: two lines

console output: second line - should now be first
first line - should now be second

result: ✔ pass

test #2: example call

console output: did gyre and gimble in the wabe.
Twas brillig and the slithy toves
and the mome raths outgrabe.
All mimsey were the borogroves,
"Beware the Jabberwock, my son,

Beware the JubJub bird and shun
the jaws that bite, the claws that catch,
the frumious bandersnatch."

result: ✔ pass

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○ BJP4 Exercise 6.6: readEntireFile

 Show Header

Language/Type:  Java [file processing Scanner](#)
Author: Marty Stepp (on 2016/09/08)

Write a method named `readEntireFile` that accepts a `Scanner` representing an input file as its parameter, then reads that file and returns the entire text contents of that file as a `String`.

Type your solution here:

```
1 public static String readEntireFile(Scanner input) {
2     String final_s = "";
3     while (input.hasNextLine()) {
4         String line = input.nextLine();
5         final_s += line;
6         final_s += "\n";
7     }
8     return final_s;
9 }
```

This is a **method problem**. Write a Java method as described. Do not write a complete program or class; just the method(s) above.

 4 Indent **Submit**

☒ Sound F/X
☒ Highlighting

✔ You passed 1 of 1 tests.

[Go to the next problem: flipLines](#)

test #1: Test 1
return: "hello there

how are you

I am fine

...

result: ✔ pass

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○ BJP4 Exercise 6.5: collapseSpaces

[Show Header](#)**Language/Type:**  Java [file processing Scanner](#)**Author:** Kimberly Todd (on 2016/09/08)

Write a static method named `collapseSpaces` that accepts a `Scanner` representing a file as a parameter and writes that file's text to the console, with multiple spaces or tabs reduced to single spaces between words that appear on the same line. For example, if a `Scanner` variable named `input` is reading an input file containing the following text:

```
four      score  and
seven                years ago      our
fathers brought      forth
  on this      continent
a      new
nation
```

then the call `collapseSpaces(input);` should produce the following output:

```
four score and
seven years ago our
fathers brought forth
on this continent
a new
nation
```

Each word is to appear on the same line in output as it appears in the file. Notice that lines can be blank.

Type your solution here:

```
1 public static void collapseSpaces(Scanner input) {
2     while (input.hasNextLine()) {
```

```
3      String line = input.nextLine();
4      Scanner a = new Scanner(line);
5      while (a.hasNext()) {
6          String s = a.next();
7          System.out.print(s + " ");
8      }
9      System.out.println();
10 }
11 }
```

This is a **method problem**. Write a Java method as described. Do not write a complete program or class; just the method(s) above.



4

Indent

**Submit**

- ☒ Sound F/X
- ☒ Highlighting

✔ You passed 2 of 2 tests.

[Go to the next problem: readEntireFile](#)

test #1:

collapseSpaces(new Scanner("four score and\n\nseven years ago our fathers brought forth on this continent a new nation"))

console output: four score and

seven years ago our

fathers brought forth
on this continent
a new

nation

result: ✔ pass

test #2:

collapseSpaces(new Scanner("to be or not\n\nthat is the question"))

console output: to be or not
to be

that is
the question.

result: ✔ pass

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○ BJP4 Self-Check 6.6: scannerTokens2

Language/Type: Java [file processing Scanner](#)

Author: Marty Stepp (on 2016/09/08)

```
in fourteen-hundred 92
columbus sailed the ocean blue :)
```

☒ Sound F/X

Given these lines of input, what tokens does a Scanner break the line apart into?

- a. ☒ "in", "fourteen-hundred", "92", "columbus", "sailed", "the", "ocean", "blue", "(:)"
- b. ☐ "in", "fourteen", "hundred", "92", "columbus", "sailed", "the", "ocean", "blue"
- c. ☐ "in", "fourteen-hundred", "92\ncolumbus", "sailed", "the", "ocean", "blue :)"
- d. ☐ "in", "fourteen-hundred", "92"
- e. ☐ "in fourteen-hundred 92", "columbus sailed the ocean blue :)"
- (order shuffled)

Submit

You passed 1 of 1 tests.

[Go to the next problem: scannerTokenTypes](#)

question #1: Given these lines of input, what tokens does a Scanner break the line apart into?

your answer: "in", "fourteen-hundred", "92", "columbus", "sailed", "the", "ocean", "blue", "(:)"

result: pass

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○ BJP4 Self-Check 6.5: scannerTokens

Language/Type: Java [file processing Scanner](#)

Author: Marty Stepp (on 2016/09/08)

welcome...to the matrix.

Given this line of input, what tokens does a Scanner break the line apart into?

☒ Sound F/X

- a. ☒ "welcome...to", "the", "matrix."
 - b. ☐ "welcome...", "to", "the matrix."
 - c. ☐ "welcome", "to the matrix"
 - d. ☐ "welcome...to the matrix."
 - e. ☐ "welcome", "to", "the", "matrix"
- (order shuffled)

**Submit**

You passed 1 of 1 tests.

[Go to the next problem: scannerTokens2](#)

question #1: Given this line of input, what tokens does a Scanner break the line apart into?

your answer: "welcome...to", "the", "matrix."

result: pass

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○ BJP4 Self-Check 6.4: scannerInputTxt

Language/Type: Java [file processing](#) [Scanner syntax](#)

Author: Marty Stepp (on 2016/09/08)

Write a statement that constructs a Scanner object, stored in a variable named input, to read the file input.txt, which exists in the same folder as your program.

statement

```
Scanner input = new Scanner(new File("input.txt"));
```

☒ Sound F/X**Submit**

✔ You passed 1 of 1 tests.

[Go to the next problem: scannerTokens](#)

#	question	your answer	result
1	statement	Scanner input = new Scanner(new File("input.txt"));	✔ pass

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○ BJP4 Self-Check 6.3: scannerDeclarationSyntax

Language/Type: Java [file processing](#) [Scanner syntax](#)

Author: Marty Stepp (on 2016/09/08)

Which of the following is the correct syntax to declare a Scanner to read the file `example.txt` in the current directory?

Sound F/X

- a. ☐ `Scanner input = new File("\\example.txt");`
 - b. ☒ `Scanner input = new Scanner(new File("example.txt"));`
 - c. ☐ `File input = new Scanner("/example.txt");`
 - d. ☐ `Scanner input = new Scanner("C:/example.txt");`
 - e. ☐ `Scanner input = new Scanner("C:\example.txt");`
- (order shuffled)



Submit

You passed 1 of 1 tests.

[Go to the next problem: scannerInputTxt](#)

question #1: Which of the following is the correct syntax to declare a Scanner to read the file `example.txt` in the current directory?

your answer: `Scanner input = new Scanner(new File("example.txt"));`

result: pass

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○ BJP4 Self-Check 6.2: scannerDeclaration

Language/Type:  Java [errors](#) [file processing](#) [Scanner syntax](#)

Author: Jared Jones (on 2016/09/08)

Change the following code to be correct:

```
Scanner input = new Scanner("test.dat");
```

code

```
Scanner input = new Scanner(new File("test.dat"));
```

☒ Sound F/X



Submit

✔ You passed 1 of 1 tests.

[Go to the next problem: scannerDeclarationSyntax](#)

#	question	your answer	result
1	code	Scanner input = new Scanner(new File("test.dat"));	✔ pass

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○ BJP4 Self-Check 6.1: readAFile

Language/Type: Java [file processing Scanner](#)
Author: Marty Stepp (on 2016/09/08)

How can we read data from a file in Java?

Sound F/X

- a. ☒ Using a Scanner in conjunction with a File object.
 - b. ☐ The method System.file.readLine method is the counterpoint to System.out.println and allows us to read files.
 - c. ☐ All data on the computer is in binary, so the data can be read one bit at a time using the Bit data type.
 - d. ☐ Using the System.out.println command.
 - e. ☐ By using object-oriented programming (OOP).
- (order shuffled)

**Submit**

You passed 1 of 1 tests.

[Go to the next problem: scannerDeclaration](#)

question #1: How can we read data from a file in Java?
your answer: Using a Scanner in conjunction with a File object.
result: pass

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