

## Week 11, Lecture 2

### File I/O



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## Announcements

- **Assignment 3 deadline is 4pm today.**
- **Labs 8, 9 and 10** are due **next week**.
- The **Prac Exams** will be held the **week after** on **Thurs 28th** and **Fri 29th October**. Make sure you know the details of your exam session. See the course web-page for details.

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## Week 11

### Java Genesis:

–Ch11: Exceptions and files

**Assignment 3** (deadline 4pm today)

3

```
import java.io.*;
import genesis.*;

public class ReadPoem {

    public static void main (String [ ] args)
        throws IOException {
        FileReader fr = new FileReader("poem.txt");
        BufferedReader br = new BufferedReader(fr);
        String line = br.readLine( );
        while (line != null) {
            Transcript.println(line);
            line = br.readLine( );
        }
        br.close( );
    }
}
```

4

```
import java.io.*;
import genesis.*;
public class SumNumbers {

    public static void main (String [ ] args)
        throws IOException {
        FileReader fr =
            new FileReader("numbers.txt");
        BufferedReader br = new BufferedReader(fr);
        int sum = 0;
        String line = br.readLine( );
        while (line != null) {
            Transcript.println(line);
            sum = sum + Integer.parseInt(line);
            line = br.readLine( );
        }
        Transcript.println("Sum is "+sum);
        br.close( ); } }
```

5

```
import java.io.*;
import genesis.*;
import java.util.*;
public class SumNumbersAgain {

    public static void main (String [ ] args)
        throws IOException {
        FileReader fr =
            new FileReader("numbers again.txt");
        BufferedReader br = new BufferedReader(fr);
        int sum = 0;
        String line = br.readLine( );
```

6

```

while (line != null) {
    Transcript.println(line);
    StringTokenizer st =
        new StringTokenizer(line);
    while (st.hasMoreTokens()) {
        sum = sum +
            Integer.parseInt(st.nextToken());
    }
    line = br.readLine();
}
Transcript.println("Sum is "+sum);
br.close();
}
}

```

7

```

import java.io.*;

public class WritePoem {

    public static void main (String [ ] args)
        throws IOException {

        FileWriter fw =
            new FileWriter("another poem.txt");
        PrintWriter pw = new PrintWriter(fw);
        pw.println("-----");
        pw.println("-----");
        pw.close();
    }
}

```

8

```

import java.io.*;

public class AppendPoem {

    public static void main (String [ ] args)
        throws IOException {

        FileWriter fw =
            new FileWriter("another poem.txt", true);
        PrintWriter pw = new PrintWriter(fw);
        pw.println("-----");
        pw.println("-----");
        pw.close();
    }
}

```

9

```

import java.io.*;
import java.util.*;

public class ProcessMarks {

    public static void main (String [ ] args)
        throws IOException {

        FileReader fr = new FileReader("marks.txt");
        BufferedReader br = new BufferedReader(fr);
        FileWriter fw =
            new FileWriter("results.txt");
        PrintWriter pw = new PrintWriter(fw);
        int sum;
        String line = br.readLine();
    }
}

```

10

```

while (line != null) {
    pw.print(line);
    sum = 0;
    StringTokenizer st =
        new StringTokenizer(line);
    while (st.hasMoreTokens()) {
        try {
            sum = sum +
                Integer.parseInt(st.nextToken());
        } catch (NumberFormatException e) {}
    }
    pw.println(" sum: "+sum);
    line = br.readLine();
}
br.close();
pw.close();
}
}

```

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