ENSF 380

Exercises - Lesson 19

The following exercises correspond to the video for Lesson 19.

Exercise 19.1

1. Modify the code to use character-based streams.

Lesson19_IOStream/01_ByteStream

- FileReader is similar to FileInputStream
- FileWriter is similar to FileOutputStream

Exercise 19.2

- 1. Create a program which can provide a formatted string in multiple languages.
- 2. You can assume that any data files used in testing will contain valid data.
- 3. Three Java files with comments describing methods are provided, along with three data files and an FAQ.
- 4. You may need to create additional classes and member and/or class data.
- 5. Part of this exercise is identifying the appropriate class to use for each part of the problem. Hence, no UML diagram is provided.

Lesson19_IOStream/09_Internationalization

The following code in main() – after instantiating a Translator object – produces the output shown below.

System.out.println(trans.translate(3, 8, 2021));

```
Terminal — tcsh — 116×11

[ENSF 409> java edu.ucalgary.ensf409.DayMemory en-US
The 8th of March will live in memory. It was on that day in 2021 that the important event happened.
[ENSF 409) java edu.ucalgary.ensf409.DayMemory es-80
E1 8 de Marzo vivira en nuestra memoria; fue en este dia del 2021 que ocurrio el evento importante.
[ENSF 409) java edu.ucalgary.ensf409.DyMemory el-68
H 8 Mapriou θα ζει στην μνήμη. Ήταν σε αυτήν την μέρα του 2021 που έγινε αυτό το σημαντικό γεγονός.
ENSF 409> []
```

Tip: The exercise can be solved without any I/O classes other than those referenced in this lecture, but you may need to read additional documentation.