

ICS 340 Programming Project, Deliverable A

Specification:

Start with the given Java program “prog340”, which lets you select a file to read from your computer, reads the file, and interprets that file as the specification of a graph.¹ Then enhance it to do the following:

1. Write code necessary to print out, for each Edge, the name of the Node from which the Edge emanates, the name of the Node at which the Edge terminates, and the label of the Edge, in the format listed below.

The “prog340” handout describes the format of the input file for this and all program deliverables.

As will always be the case in this class, the program must be written in Java and must run on the University Windows computer systems.

Output:

Here is sample output for one graph.

~	val	AAA	BB	C	DDD	E
Alfa	x	~	>	~	99	fig
Bravo	67	999	-42	3	x	==
Charlie	~	~	4	~	yz	9
Delta	4e	3	22	x	~	!=2
Echo	yes	~	~	~	d>e	33

The output for this file should be:

```
Edge from Alpha to Bravo labeled >.
Edge from Alpha to Delta labeled 99.
Edge from Alpha to Echo labeled fig.
Edge from Bravo to Alpha labeled 999.
Edge from Bravo to Bravo labeled -42.
Edge from Bravo to Charlie labeled 3.
Edge from Bravo to Delta labeled x.
Edge from Bravo to Echo labeled ==.
Edge from Charlie to Bravo labeled 4.
Edge from Charlie to Delta labeled yz.
Edge from Charlie to Echo labeled 9.
Edge from Delta to Alpha labeled 3.
Edge from Delta to Bravo labeled 22.
Edge from Delta to Charlie labeled x.
Edge from Delta to Echo labeled !=2.
Edge from Echo to Delta labeled d>e.
Edge from Echo to Echo labeled 33.
```

The order in which the Edges print out is not important.

¹ See the “prog340_spring2020.docx” file for details

Submit:

Submit the Java source code to the open Deliverable A submission folder on D2L. You may submit either the source code or a full Eclipse package.

You don't need to include test files.

Test Files:

Four test files are included with the deliverable code base - *AB0.txt*, *A1.txt*, *A4.txt*, *ABD6.tx*. These will be used to test and grade your deliverable, but additional test files may also be used, if needed.

Grading:

This deliverable is worth 20 points. There are 4 test files (*AB0.txt*, *A1.txt*, *A4.txt*, *ABD6.txt*). Correct output for each test file is worth 4 points. Proper documentation, and doing the work with minimal disruption to the existing codebase ("design") are worth 2 points each.

Due Dates:

The program is due on Feb 10thth at 2 pm in the D2L "Deliverable A" dropbox.