

Unlimited Attempts Allowed

Machine Language

9/23/2022

97/100 Points

Attempt 1

Review Feedback
9/23/2022Attempt 1 Score:
97/100

View Feedback

Anonymous Grading: no

Preparation

Look over the following links:

- [Intro to Machine Language](https://www.cs.iupui.edu/~ajharris/n301/alg/tmcm-java-labs/labs/xComputerLab1.html) <https://www.cs.iupui.edu/~ajharris/n301/alg/tmcm-java-labs/labs/xComputerLab1.html> with xComputer
- [xComputer challenges](https://www.cs.iupui.edu/~ajharris/n301/assembler.html) <https://www.cs.iupui.edu/~ajharris/n301/assembler.html>
- [xComputer language summary](https://www.cs.iupui.edu/~ajharris/n301/xMachine.html) <https://www.cs.iupui.edu/~ajharris/n301/xMachine.html>
- [Machine Language Assignment](https://www.cs.iupui.edu/~ajharris/230/machineLanguageLab.html) <https://www.cs.iupui.edu/~ajharris/230/machineLanguageLab.html>

The Assignment

The assignment is described fully in [this](https://www.cs.iupui.edu/~ajharris/230/machineLanguageLab.html) <https://www.cs.iupui.edu/~ajharris/230/machineLanguageLab.html> document. Please complete the assignment as specified in that document. Please copy the code from your editor and paste it in the provided text area.

This assignment is very easy if you're paying close attention and following along in lecture and in recitation. If you try to do this one totally on your own without coming to class, you're kind of doomed. Google will not be your friend on this assignment.

It is not necessary to use xComputer to solve this problem (a text editor is fine) but you can use the one online here:

<http://www.cs.iupui.edu/~ajharris/230/xComputer> <http://www.cs.iupui.edu/~ajharris/230/xComputer>

The version above works in the browser with no download. If you want, you can also use the version I used in the video, but you need to download and have the Java Virtual machine installed:



<http://math.hws.edu/TMCM/java/classes/xComputer.jar> <http://math.hws.edu/TMCM/java/classes/xComputer.jar>

Download the file to your desktop. It should run by double-clicking on most machines. If this does not work for you, talk to me or one of the other leaders and we'll help, or you can just do it in the lab.

Blackbelt Challenge

This is the first assignment that has a blackbelt challenge. You may not attempt the blackbelt until you've got the basic version working, and your blackbelt must be a new file. The blackbelt challenge is to add a new twist to your multiplier. For example:

- **negative numbers** Make your program handle multiplication of negative values
- **zero** Handle zero as a multiplicand.
- **division** See if you can make division work. It's fine to keep it integer division. Just calculate a quotient and a remainder
- **whatever else you can dream up**

File Name		Size	
	Black Belt.txt	1.62 KB	✓
	200109646...ge)-1.txt	540 Bytes	✓