

Homework 8: Virtual Machine I

Requirements:

Build the Jack/Hack architecture Virtual Machine (Part I), in Java, per the instructions and guidance covered in class.

Grading method:

As usual with programming assignments, we look for elegance, clarity, reasonable documentation, and neatness.

Follow the instructions in lecture as far the classes and methods to build, as well as allowing command-line arguments as instructed. Document each method (description, precondition, postcondition) and add author information on each file. Provide an algorithm for your main method that drives the Virtual Machine translation process.

What do you turn in?

The **.java files** (there are 3 of them) ONLY, in a ZIP file per Project Submission Guidelines (see document on Blackboard). The three Java files are:

VirtualMachinePart1.java, ***Parser.java***, and ***CodeWriter.java***, the well built points below are for sticking to this Object Oriented design. Please reuse the start of the main method from Assembler.java to accept command line/Scanner input to ask for the .vm file to translate.

NOTE: DO NOT SUBMIT PROJECT FILES (Eclipse, JCreator, etc.), the Java files should not be part of a package. To test, place all 3 files in a folder and open in Geany. Compile all and run VirtualMachinePart1.java, the instructor will grade in a similar environment. Failure to follow instructions may result in a 0 or non-submission.

<i>VM Part I</i>	<i>Working?</i>
Working?	/ 60
Well built?	/ 30
Subtotal	/ 90
Documentation	/ 100

See <http://nand2tetris.org/07.php> for some tips/resources/tools (note that the assignment on the website may be substantially different from the assignment that is described above, if you need clarification email your instructor. You will be graded based on this documents requirements).