

CSCI 341: Computer Organization
WS 3: RARS Basics

1	<p>Why is the instruction syntax so rigid in assembly?</p> <p>Solution: It reduces the complexity of the hardware.</p>
2	<p>Use RARS to find another name for the .asciz assembler directive. State where in RARS you found it.</p> <p>Solution: .string (the help menu somewhere I presume)</p>
3	<p>Write assembly code to print an integer. The integer is in s0 currently.</p> <p>Solution: add a0, s0, zero addi a7, zero, 1 ecall</p>
4	<p>Go through the RARS help menu and find an interesting pseudo instruction. Write it down here and explain what it does.</p> <p>Solution: any pseudo instruction is fine</p>
5	<p>Go through the RARS help menu and find the ecall requirements for getting a random integer. List which registers need to be set, the values they need to be set to, and which register the random integer will be placed in.</p> <p>Solution: a7=41, a0=index of random number generator, a0=random int</p>
6	<p>Go through the RARS help menu and find the debugging section. Read it and answer the following questions.</p> <ol style="list-style-type: none"> 1. Can values be changed during execution of the program while in debug mode? 2. Is the labels menu displayed by default? 3. Can you step backwards in debug mode? 4. How do you set a breakpoint? <p>Solution: For 1, yes For 2, no, open it under the settings menu</p>

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	<p>For 3, yes</p> <p>For 4, using the checkboxes next to each instruction displayed in the Text Segment window</p>
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