Practice

☐   Error retrieving assignment external tools   ☐

Due Sep 30 at 11:59pm   **Points** 12   **Questions** 6

Available until Sep 30 at 11:59pm   **Time Limit** 15 Minutes

Instructions

This is a practice quiz. It will test your understanding of (a) MSP430 assembly language directives, (b) MSP430 assembly language programs and subroutines, and (c) ability to read and comprehend code snippets written in MSP430 assembly language.

Attempt History

	Attempt		Time	Score
LATEST	**Attempt 1**	**(https://uah.instructure.com/courses/48289/quizzes/98801/history?version=1)**	5 minutes	8.67 out of 12

☐ Correct answers are hidden.

Submitted Sep 30 at 10:08pm

Question 1   1 / 1 pts

Which directive would you use to allocate and initialize one or more 32-bit long integers?

○ .int

◉ .long

○ .word

○ .string

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What does the following directive do?

```
wvars: .word 2, -1, 3, 4
```

○ Allocates 4 32-bit words in memory and initializes them with values 2, -1, 3, 4

○ Allocates 4 words in memory without initializing them

◉ Allocates 4 16-bit words in memory and initializes them with values 2, -1, 3, 4, respectively

○ Allocates 4 bytes in memory and initializes them with values 2, -1, 3, 4

Question 3

2 / 2 pts

Consider the following .data section starting at the address 0x0800 (ASCII code for 'a' is 0x61).

```
.data

lb1: .cstring "abcd"
```

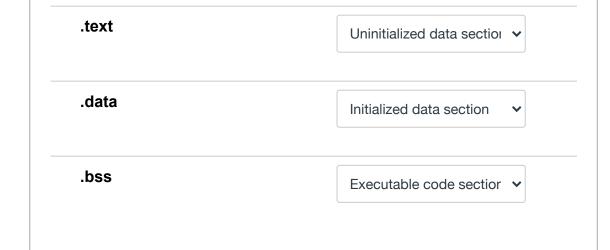What is the result of the following instruction?

```
MOV.W &lb1, R5
```

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○ R5=0x0061

○ R5=0x0062

○ R5=0x0800

◉ R5=0x6261

Partial   **Question 4**   0.67 / 2 pts

The assembly language programs contain various sections for initialized data, non-initialized data, executable code. Match directives with their description?
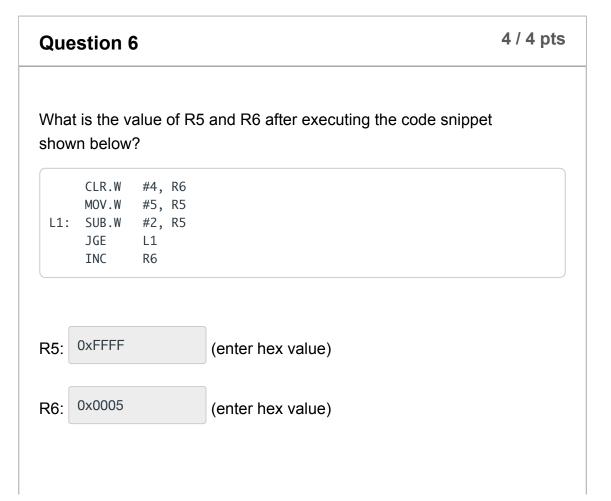
.text | Uninitialized data sectioı ⌄ |

.data | Initialized data section   ⌄ |

.bss | Executable code sectioɪ ⌄ |

Incorrect   **Question 5**   0 / 2 pts

How many words is pushed onto the program stack when executing the following code snippet concluding with the call instruction.

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```
PUSH.W   #8

CALL      #mysuba

. . .

mya: .word 1, 2, 3, 4
```

○ 7

○ 3

◉ 6

○ 4

Question 6   4 / 4 pts

What is the value of R5 and R6 after executing the code snippet
shown below?

```
        CLR.W    #4, R6
        MOV.W    #5, R5
L1:     SUB.W    #2, R5
        JGE      L1
        INC      R6
```

R5: 0xFFFF   (enter hex value)

R6: 0x0005   (enter hex value)

A

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0xFFFF

Answer 2:

0x0005

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