

## lab04p1b.s Questions

Name: Ado Maksic and Davis Garman

a. What is the value of label Z?

0x11c

b. What is the value of the data referenced by the label Y? (hex)

0xddd5

c. What is the value of the data referenced by the label Y? (decimal)

56789

d. What memory address is referenced by the label Y? (hex)

0x11a

e. What memory address is referenced by the label X?

0x118

f. What is the machine instruction at location 0x8 of the .text section?

“ldr r5, [r4, #4]”

g. What is the offset value of the instruction at location 0x14 of the .text section?

8 is the offset.

h. What will the contents of register r7 be at completion of execution (hex)?

0xdebf

i. Screenshot the memory (bytes) for the data section bounded by the begin and end coremarks. Circle and identify the bytes for the variables X, Y and Z (step thru program first).

00000110	a5a50000	bbbbbbbb	ddd5aaea	0000debf	.....	.....	.....	....
00000120	eeeeeeee	00000000	aaaaaaaa	aaaaaaaa	.....	....	....	....

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### lab04p2a.s

00000000	e92d00f0	e59f400c	e5945004	e320f000
00000010	e8bd00f0	e12ffff1e	00000024	00000000
00000020	bbbbbbbb	feedface	eeeeeeee	00000000

Value of the data associated with W variable: 0xfeedface

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### lab04p2b.s Screenshot

00000140	00 00 00 00	00 00 00 00	00 00 00 00	bb bb bb bb	.....	.....	.....	.....
00000150	55 aa aa aa	ff ff ff ff	44 33 22 11	ee ee ee ee	U.....	.....	D3"	.....

2.

B value: 0x55

W value: 0x11223344

3. .org is an indication on where the next piece of code or data should go in memory relative to the current segment of memory.

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### lab04p3.s Screenshot

00000110	0000 a5a5	bbbb bbbb	a5 <b>7b</b> b9e3	ba5e 0000
00000120	eeee eeee	0000 0000	aaaa aaaa	aaaa aaaa

2.

A = 0x7b

B = 0xb9e3

C = 0xba5e