

# CMSI 284-02

## COMPUTER SYSTEMS ORGANIZATION/ SYSTEMS PROGRAMMING

Spring 2016

### Assignment 0209 Feedback

Please consult the written feedback (on GitHub if you submitted electronically; written on your submission if you submitted on paper) to determine points of improvement (if any). If anything is unclear, don't hesitate to ask me or a class TA.

To assist with questions, the number/character choices that you supplied, along with our interpretation of your written answer, are also included.

Mackenzie Tjogas

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	<i>Your Selection or Answer</i>	<i>1a</i>	<i>1b</i>	<i>4d</i>	<i>4f</i>
1.1	-31005			+	
1.1a	1763	/			
1.1b	6E+03				
1.1c	111 1001 0001 1101	/			
1.2	C689			+	
1.2a	50825	+			
1.2b	-14711	+			
1.2c	1100 0110 1000 1001	?			
1.3	01AB			+	
1.3a	427	+			
1.3b	-65109	/			
1.3c	0000 0001 1010 1011	+			
1.4	1011 1111 0010 1000			+	
1.4a	48936	+			
1.4b	-16600	+			
1.4c	BF28	+			
1.5	90B4			+	
1.5a	37044	+			
1.5b	-28492	+			
1.5c	1001 0000 1011 0100	+			
1.6	52395			+	
1.6a	-6571	/			
1.6b	6655	/			
1.6c	110 0110 0101 0101	/			
1.7	1013			+	
1.7a	-11				
1.7b	3F5	/			
1.7c	11 1111 0101	/			

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1.8	-117				+
1.8a	11				
1.8b	75	/			
1.8c	111 0101	/			
1.9	0001 1111 1111 0100				+
1.9a	8180	+			
1.9b	-57356	/			
1.9c	1FF4	+			
1.10	5B23				+
1.10a	23331	+			
1.10b	-42205				
1.10c	0101 1011 0010 0011	+			
2					+
2.1	A432; your negative = 5BCE	+			
2.2	E412; your negative = 1BEE	+			
2.3	9123; your negative = 6EDD	+			
2.4	4AB2; your negative = B54E	+			
2.5	01A3; your negative = FE5D	+			
3					+
3.1	28A3 + 5A42				
3.1a	saturated: 7FFF	+			
3.1b	modular: 8285				
3.1c	carry: n	+			
3.1d	overflow: y	+			
3.2	7016 + E759				
3.2a	saturated: 576F	+			
3.2b	modular: 576F	+			
3.2c	carry: y	+			
3.2d	overflow: n	+			

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3.3	BBA3 + 8A29				
3.3a	saturated: 8000	+			
3.3b	modular: 45CC	+			
3.3c	carry: y	+			
3.3d	overflow: y	+			
3.4	A1B3 + 9A68				
3.4a	saturated: 8000	+			
3.4b	modular: 3C1B	+			
3.4c	carry: y	+			
3.4d	overflow: y	+			
3.5	A284 + 2AB3				
3.5a	saturated: CD37	+			
3.5b	modular: CD37	+			
3.5c	carry: n	+			
3.5d	overflow: n	+			
3.6	58B6 + 0F37				
3.6a	saturated: 67ED	+			
3.6b	modular: 67ED	+			
3.6c	carry: n	+			
3.6d	overflow: n	+			
3.7	C089 + C0A4				
3.7a	saturated: 812D	+			
3.7b	modular: 812D	+			
3.7c	carry: y	+			
3.7d	overflow: n	+			
4.1	Minimum capacity (gigabytes), price: 2000, \$109.99 Maximum capacity (gigabytes), price: 6000, \$279.99				
4.2a	\$0.0000000055000000	+			
4.2b	\$0.0000000046700000	+			
4.2c	\$0.00	+			
4.3a	\$0.00000000000000000000000000000055				
4.3b	\$0.000000000000000000000000000000467				
4.3c	\$0.00000000000000000000000000000083				

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5.1	0.4859			+	
5.1a	3E F8 C7 E3	+			
5.1b	blank	+			
5.2a	16777217	+			
5.2b	9007199264740993	+			
5.3	14 AC E6 3A			+	
5.3a	1. -86 zeroes- 010 1100 1110 0110 0011 1010				
5.3b	1 + 2 <sup>^</sup> (-86) + 2 <sup>^</sup> (-88) + 2 <sup>^</sup> (-89) + 2 <sup>^</sup> (-92) + 2 <sup>^</sup> (-93) + ...	/			
5.4	03 A2 BA 24 61 83 FC 25			+	
5.4a	1. -709 zeroes- 0010 1011 1010 0010 0100 0110 0001 1000 0011 1111 1100 0010 0101				
5.4b	1 + 2 <sup>^</sup> (-712) + 2 <sup>^</sup> (-714) + 2 <sup>^</sup> (-716) + 2 <sup>^</sup> (-718) + ...	/			
6.1	10 AB 34			+	
6.1a	F4 8A AC B4		+		
6.1b	DB EA DF 34		+		
6.1c	00 10 AB 34		+		
6.2	M(A)(C)K(E)(N)ZI 0000004D 000024B6 000024B8 0000004B 000024BA 000024C3 0000005A 00000049			+	
6.2a	4D E2 92 B6 E2 92 B8 4B E2 92 BA E2 93 83 5A 49		+		
6.2b	004D 24B6 24B8 004B 24BA 24C3 005A 0049		+		
6.2c	0000004D 000024B6 000024B8 0000004B 000024BA 000024C3 0000005A 00000049		+		
6.3	1F60E 1F459 1F42C 1F34D			+	
6.3a	F0 9F 98 8E F0 9F 91 99 F0 9F 90 AC F0 9F 8D B9		+		
6.3b	D83D DE0E D83D D059 D83D DC2C D83C DF4D		+		
6.3c	0001F60E 0001F459 0001F42C 0001F34D		+		
6.4			+		
Overall			+	+	+