CSC 3210

Computer Organization and Programming

Lab 4

Answer Sheet

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Section: 10

Debug through each line of code and explain the register content.

Line number:7

Instruction: mov al,245

Register value: 00EFF8F5

Explanation: Converts 245 from decimal to hexadecimal and stores it into the lower 8 bit of EAX

Line number:8

Instruction: mov bl, 41

Register value: 00C27029

Explanation: Converts 41 into hexadecimal and stores it into the lower 8 bit of EBX

Line number:9

Instruction: mov cl,11

Register value: 0079100B

Explanation: Converts 11 into hexadecimal and stores it into the lower 8 bit of ECX

Line number:10

Instruction: mov dl,215

Register value: 007910D7

Explanation: Converts 215 into hexadecimal and stores it into the lower 8 bit of EDX

Line number:11

Instruction: sub al,dl

Register value: 00EFF81E

Explanation: Subtracts the dl register value from the al register and stores the result into the lower 8 bit of EAX

Line number:12

Instruction: add dl, cl

Register value: 007910E2

Explanation: Adds the register values of dl and cl, then it stores the sum into the lower 8 bit of EDX

Line number:13

Instruction: sub dl,bl

Register value: 007910B9

Explanation: Subtracts the register value of bl from dl and stores the difference into the lower 8 bit of EDX

Line number:14

Instruction: mov al, dl

Register value: 00EFF8B9

Explanation: Stores the dl register value into al which is the lower 8 bit of EAX

