CSUS, Computer Science Department, CSC35, Spring 2021, Dr. Ghansah

Homework 3 (DATA TRANSFER, ADDRESSING, ARITHMETIC)

Note: Submission of this Homework Assignment is optional. It will not be graded but if you do it, you might be better prepared for exams. I will provide solution to this homework. All exams will be multiple choice on Canvas so you should know your material very well.

The following problems are from your Irvine Textbook Ed 7

Do the following problems from your text Irvine Ed 7

Q1 Page 134, sec 4.9.1. Do the following problems: 1,3,5,11,17

Q2. Page 136, sec 4.9.2. Do the following problems: 1,3,7,15,16

SUBMISSION (OPTIONAL): Submit Electronically via *Canvas*. FileName must be according to the format specified in the course syllabus.

SOLUTIONS ALL

4.9.1 Short Answer

1. a. edx = FFFF8002h b. edx = 00004321h

3. eax = 3002FFFFh

5. Parity Bit (0) *IG:* ***Note: Even parity refers to number of 1 set bits being even, NOT whether the number represented in the register is even or odd number. Note: Intel uses Odd Parity, ie. Parity bit is set to create odd number of 1's .***

11. eax = ***12341237h***

17. (a) FCh (b) 01h

4.9.2 Algorithm Workbench

1. Code example:

```
mov  ax,word ptr three
mov  bx,word ptr three+2
mov  three,bx
mov  word ptr three+2,ax
```

3. Code example:

```
mov al,01110101
add al,0                ; PF = 0 (odd)
```

7. Code example: EAX = -val2 + 7 – val3 + val1

```
mov  eax,val2
neg  eax
add  eax,7
sub  eax,val3
```

```
add  eax,val1
```

15. Code:

```
mov al, BYTE PTR myWords+1
```

16. Code:

```
mov eax, DWORD PTR myBytes
```