

Homework 3

1 Identify the op-code and operand for the instruction `CMP CX,DX`.

2 Which instruction below loads register `BX` with the data `I000H`?

- (a) `MOV [I000H],BX`
- (b) `MOV BX, 1000H`
- (c) `MOV BX,[1000H]`
- (d) `ADD BX, 1000H`

3 In Question 4.1.2, which instruction loads register `BX` with the contents of memory location `1000H`?

6 Determine the contents of register `AL` after the following instructions have executed:

```
MOV BL,8CH
MOV AL,7EH
ADD AL,BL
```

7 The instruction sequence

```
CMP BL,AL
JA IO0H
```

will transfer control to memory location `100H` if `BL` _____ `AL`.

Answers to Homework 3:

1 Op-code: CMP, operand: CX, DX

2 (b)

3 (c)

6 OAH (and the carry flag is set)

7 $BL > AL$