

CSE331L_7 – 8086 pseudo code

1. Add 2 numbers from two different memory location and write the result in DX register.

```
MOV AX, 0000H
MOV DS, AX
MOV BX, 4010H ; 0000+4010= 4010 H (Physical Address)
MOV BYTE PTR DS:[BX]

MOV AX, FFFFH
MOV DS, AX
MOV BX, FFFFH
MOV AL, BYTE PTR DS:[BX]

ADD CL, AL
MOV CH, 0
MOV DX, CX
```

2. Read two number from two memory locations of MPU: 04010 H and 40012 H

```
MOV AX, 0000 H
MOV DS, AX
MOV BX, 4010 H
MOV AL, BYTE PTR DS:[BX]

MOV CL, AL ;
MOV AX, 4000 H
MOV DS, AX
MOV BX, 0012 H
MOV AL, BYTE PTR DS:[BX]

MOV CH, AL
```

3. Write value of CL reg. in two memory locations of MPU: FFFFF H and 00000 H

```
MOV AX, F000 H ; F0000+FFFF= FFFFF H (Physical Address)
MOV DS, AX
MOV BX, FFFF H
MOV DS:[BX], CL ; Writing in FFFFF H location of MPU

MOV AX, 0000 H ; 00000+0000= 00000 H (Physical Address)
MOV DS, AX
MOV BX, 0000 H
MOV DS:[BX], CL ; Writing in 00000 H location of MPU
```

4. Read two number from two memory locations of PIO 8255: 4010 H and 4012 H

```
MOV DX, 4010 H
IN AL, DX ; Reading from port address of 4010 H

MOV DX, 4012 H
IN AL, DX ; Reading from port address of 4010 H
```

5. Write the value of CL reg. in two memory locations of PIO 8255: FFFF H and 0000 H

```
MOV DX, FFFF H
OUTDX, AL ; Writing to a port address of FFFF H

MOV DX, 0000 H
OUT DX, AL ; Writing to a port address of 0000 H
```

6. Read two numbers from the first and last memory address of MPU8086 and write the greater result in the last port address of PIO8255

```
MOV AX, 0000H
MOV DS, AX
MOV BX, 0000H
MOV BYTE PTR DS:[BX]
MOV CL, AL

MOV AX, F000H
MOV DS, AX
MOV BX, FFFFH
MOV BYTE PTR DS:[BX]

CMP AL, CL
JG L1

MOV DX, FFFFH
OUT DX, CL
JUMP END

L1: MOV DX, FFFFH
    OUT DX, AL

END
```