

Homework05

Chapter5

- **5.15 :**

```
1110 001 000100000 R1<-0x3121
0010 010 000100000 R2<-Mem[0x3122]
1010 011 000100001 R3<-Mem[Mem[0x3123]]
0110 100 010 000001 R4<-Mem[R2+0x0001]
```

- **5.16 :**

- a. PC-relative mode
- b. indirective mode
- c. Base+offset

- **5.37 :** IR, PC, SEXT, ADD2MUX, ADD1MUX, MAR, MEMORY, MDR, REG FILE, MARMUX, GateMARMUX, NZP, LOGIC
- **5.39 :** IR, PC, SEXT, ADD2MUX, ADD1MUX, REG FILE, MARMUX, GateMARMUX, NZP, LOGIC
- **5.50 :** MAR

Chapter6

- **6.9 :**

```
        .ORIG x3000
        LD R1,TIMES
        LD R0,CH
LOOP    TRAP X21
        ADD R1,R1,#-1
        BRP LOOP
        TRAP X25
        CH .FILL #90
        TIMES .FILL #100
        .END
```

- **6.10 :**

```
        .ORIG x3000
        AND R2,R2,#1
        TRAP X25
        .END
```