

EXPERIMENT 1.1

Addition and subtraction of two eight bit hexadecimal numbers by immediate addressing mode and store the result in general purpose registers.

Code:

```
1      ORG 00H
2      MOV A,#10H ; load 10H to A
3      ADD A,#1DH ; add 1DH to A
4      MOV R1,A   ; store result in R1
5      JNC L1
6      INC R0     ; store carry in R0
7      L1: MOV A,#0AH ; load 0AH in A
8          SUBB A,#05H; Sub 05H from A
9          MOV R3,A   ; store result in R3
10         JNC L2
11         INC R2     ; store carry in R2
12     L2: NOP
13     END
```

Output:

Register	Value
Regs	
r0	0x00
r1	0x2d
r2	0x00
r3	0x05
r4	0x00
r5	0x00
r6	0x00
r7	0x00
Sys	
a	0x05
b	0x00
sp	0x07
sp_max	0x07
dptr	0x0000
PC \$	C:0x0011
states	11
sec	0.00000550
psw	0x00