

## EXPERIMENT 5 HEX TO BCD

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Code:

```
1 ; HEX TO BCD
2     MOV R0, #0FFH ; value to be converted
3     MOV A, R0      ; store the value in A
4     MOV B, #64H    ; to be divided for MSB
5     DIV AB          ; divide for 100th place
6     MOV R1, A       ; store MSB in R1
7     MOV A, B         ; load A with remainder
8     MOV B, #0AH     ; 10 is the divider
9     DIV AB          ; divide for tenth place
10    SWAP A           ; make it the upper nibble
11    ADD A, B         ; add remainder to oneth place
12    MOV R2, A        ; store in R2
13    END              ; result in R1 and R2
```

Output:

Register	Value
Regs	
r0	0xff
r1	0x02
r2	0x55
r3	0x00
r4	0x00
r5	0x00
r6	0x00
r7	0x00
Sys	
a	0x55
b	0x05
s	0x07
s	0x07
d	0x0000
P	C:0x0012
s	19
s	0.00000950
p	0x00

Address:	i:00
I:0x00:	FF 02 55 00 00 00 00 00 00 00 00 00 00 00
I:0x10:	00 00 00 00 00 00 00 00 00 00 00 00 00 00
I:0x20:	00 00 00 00 00 00 00 00 00 00 00 00 00 00
I:0x30:	00 00 00 00 00 00 00 00 00 00 00 00 00 00
I:0x40:	00 00 00 00 00 00 00 00 00 00 00 00 00 00
I:0x50:	00 00 00 00 00 00 00 00 00 00 00 00 00 00

input: R0

output: R1 and R2