

DAA.

lower nibble of AL > 9

$$AL = AL + 06H.$$

upper nibble of AL > 9

$$AL = AL + 60h.$$

$$CL = 29$$

$$AL = 53.$$

Add AL, CL

$$AL = AL + CL$$

$$= 29 + 53$$

$$= 7C.$$

lower nibble of AL $\sim C(12) > 9$.

$$AL = AL + 06h$$

$$= 7d(12) + 6$$

$$= 1100 + 0110$$

$$= 1011 \quad 0011$$

$$\frac{0000}{8}$$

$$1100$$

$$\frac{0110}{2}$$

$$2$$

$$= 82h.$$

$$\begin{array}{r} 8 \ 4 \ 2 \ 1 \\ 1 \ 1 \ 0 \ 0 \\ 0 \ 1 \ 1 \ 0 \\ \hline 1 \ 0 \ 0 \ 0 \end{array}$$

$$7 \ C$$

$$0 \ 6$$

$$\begin{array}{r} 0111 \ 1100 \\ 0000 \ 0110 \\ \hline 1000 \ 0010 \\ 8 \ 2 \end{array}$$

$$\begin{array}{r} 1001 \ 1100 \\ 0000 \ 0110 \\ \hline 1010 \ 0010 \end{array}$$

$$A2 = A2 + C1$$

$$= 73 + 29h = 9Ch.$$

lower nibble of AL is $C(12) > 9$.

$$AL = 9Ch + 06$$

$$= 1010 \ 0010$$

$$= A2$$

$$\begin{array}{r} 1010 \ 0010 \\ 0110 \ 0000 \\ \hline 1000 \ 0010 \end{array}$$

$$A2 = A2 + 60$$

$$= 1010 \ 0010 + 0100 \ 0000$$

$$= 1010 \ 0010 \quad CF = 1$$