

AAS (Ascii adjust after subtraction)

Reg (3) - JA to adjust result

$$AL = 39h - 33h$$

$$= 06h$$

lower nibble of AL is 6 < 9, so
no change will happen.

$$AX = 0006h$$

AX = no change

$$'9' - '9'$$

$$AL = 33h - 39h$$

$$= FAh$$

lower nibble of AL is A(10) > 9.

so

$$AL = AL - 6$$

$$= 1010 - 0110$$

$$= 04h$$

$$AH = 0 - 1$$

$$0101 = 1111 - 0001$$

$$FA = 1111$$

$$00 + 0A FF04$$

$$= 0100 0101$$

$$\begin{array}{r} 1010 \\ 0110 \\ \hline 0100 \\ 1111 \\ 0001 \\ \hline 1110 \end{array}$$