

1. A: This instruction is used to make sure the result of adding two packed BCD numbers is adjusted to be a legal BCD number. The result of the addition must be in AL for DAA to work correctly. If the lower nibble in AL after an addition is greater than 9 or AF was set by the addition, then the DAA instruction will add 6 to the lower nibble.

Example: Here, $AL = 27H$ and $AL = 35H$ is $5CH$

\therefore assume result = $AL = 5CH$

digit in the low nibbles of $AL = C = 12$

$$\therefore (12 - 10) = 2$$

Keeping 2 and add 1

The higher four nibbles of $AL = 5 + 1 = 6$

\therefore The result is $62H$

2) CMP

This instruction compares a byte/word in the specified source with a byte/word in the specified destination. The source can be an immediate number, a register, or a memory location. The destination can be also a memory location.

Example:

$CX = DX \quad 01010101h$

$CX > DX \quad 0 \quad 01010101h$

$CX < BX \quad 0 \quad 01010101h$

$CMP \ AL \ 000h$

$CMP \ BH, \ CL$

$CMP \ EX, \ TEMP$

$CMP \ PRICE[DX], 40H$