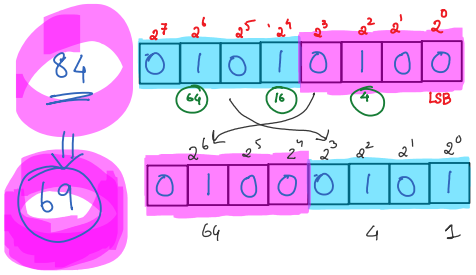
Swap two nibbles in a byte

03 November 2021 16:02

A = "65" = 1000001

190 ⇒ Bit



Input : 84
Output : 69

84 AND 240 ⇒ Left Nibble >> 4

84 AND 15 ⇒ right Nibble << 4

240 ⇒ 11110000 ⇒

15 ⇒ 00001111

left nibble = 01010100 AND 11110000
84 240

= 01010000

Right nibble = 01010100 AND 00001111
8 15

= 00000100

leftnibble ⇒ right shift by 4places ⇒ 0000 0101

Right nibble ⇒ left shift by 4places ⇒ 01000000

Bitwise OR

01000101

69