

Explanation: Why we left shift carry.

Example :- $2 + 3$

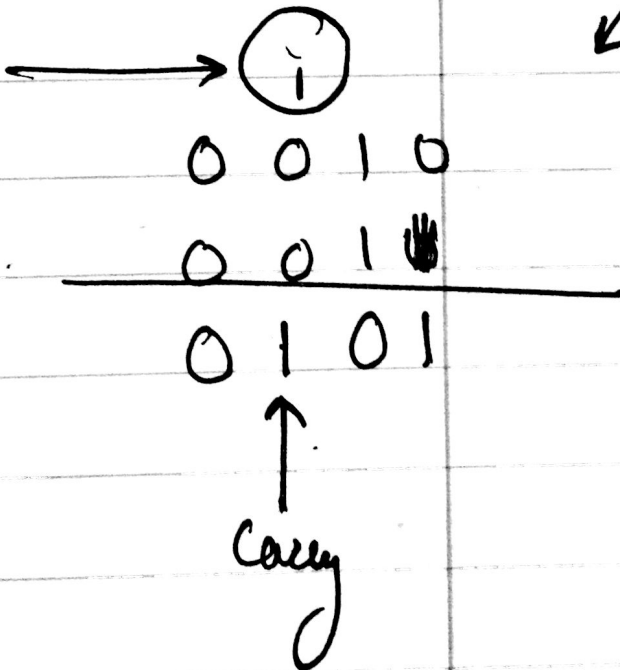
$$2 = 0010$$

$$3 = 0011$$

$$2 \& 3 = 0010$$

But carry of $2 + 3$ is $= 0100$

Carry.



Hence we left shift by 1 for carry.