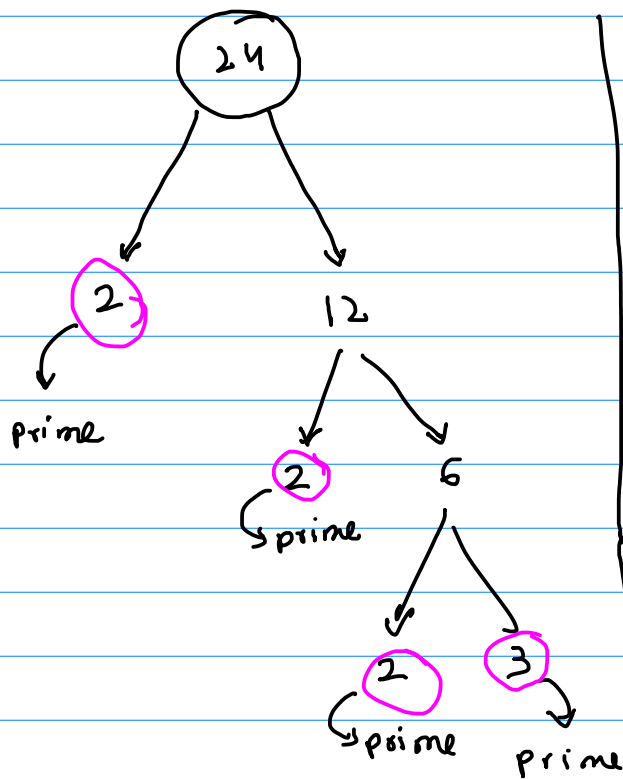
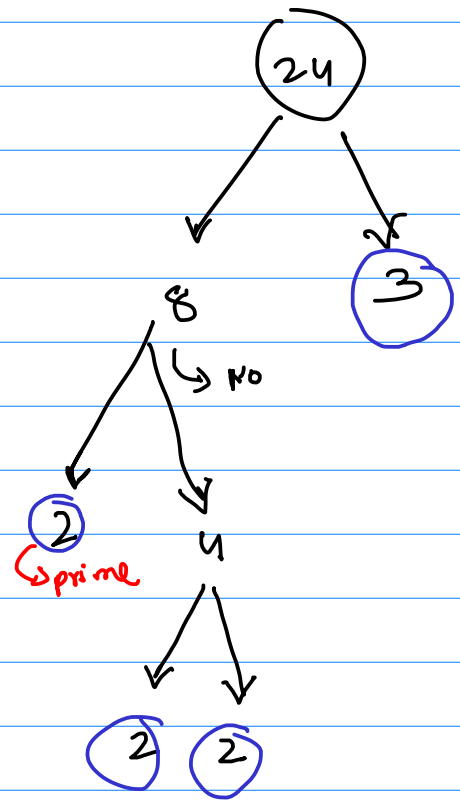


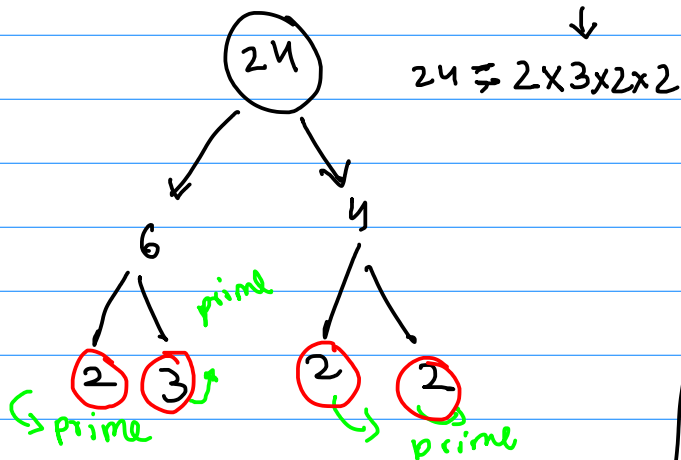
Factor tree := A way to "Factorize" the number.  
 In other words, we write the original number as product of various primes in tree form.



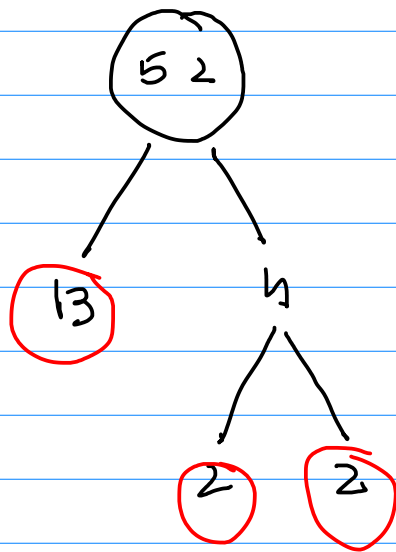
$$24 = 2 \times 2 \times 2 \times 3$$



$$24 = 3 \times 2 \times 2 \times 2$$



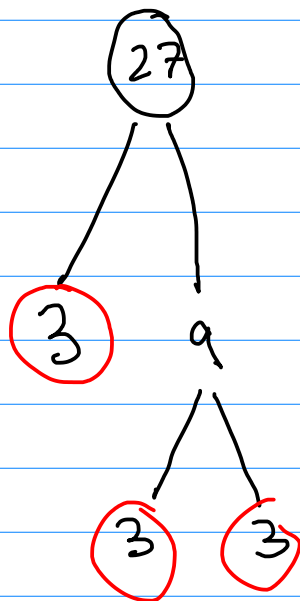
$$24 = 2 \times 3 \times 2 \times 2$$



$$52 = 13 \times 2 \times 2$$

27

52



$$27 = 3 \times 3 \times 3$$

④ Prime factorisation Method :-

$$\begin{array}{r|l}
 2 & 100 \\
 \hline
 5 & 50 \\
 \hline
 2 & 10 \\
 \hline
 5 & 5 \\
 \hline
 & 1
 \end{array}$$

$$100 = 2 \times 5 \times 2 \times 5$$

L.C.M

→ least / lowest common multiple

5 → 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, ...

7 → 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, ...

Common multiples of 5 and 7 are 35, 70, 105, ...

$$\underline{5, 7}$$

so L.C.M of 5 and 7 is 35

$$\begin{array}{r|l}
 2 & 24, 16 \\
 \hline
 2 & 12, 8 \\
 \hline
 2 & 6, 4 \\
 \hline
 & 3, 2
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M} &= 2 \times 2 \times 2 \times 3 \times 2 \\
 &= 48
 \end{aligned}$$