** **Big Omega Notation :** def :
Opposite of Big-Oh notation

Suppose than an algo has complexity of

$$\Omega(N^3)$$

Q what does it means in simple term?
Ans:) 1) This means that it will take atleast N^3 time complexity.
2) So, this means it the lower bound.
3) It will take atleast N^3, it can also take N^4, $N^3 \log n$ or $N^{3} * 2^n$ etc.
But, it will never be lesser than N^3
4) Minimum N^3 time complexity will be required.

** **Maths :**

$$\lim_{n \to \infty} \frac{f(n)}{g(n)} > 0$$

Note : But we actually care about 0 Big-Oh notation
Why?
Ans: We always look of at the worst case