

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

Suppose: then 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
time complexity.

N^3

2) So, this means it is 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.

** Matho:

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

Note: But we actually care about Big-Oh notation
why?

Ans: We always look at the worst case.