

Time Complexity – by Kunal Kushwaha(KK)

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Procedure of analyzing complexity

Q.1) What do we consider when thinking about complexity:

A) when will your software crash if 10 people is are going to use or 2 million people are going to use ?

Ans: Simple 2 million people, because 2 million user will we interacting at the same time then the high chance of server crash.

B) So, always the worst case will find the time complexity. Always looks for worst case complexity to solve any algorithm.

C) Always look at complexity for large / infinity data.

D) a) Even the value of actual time is different they are all growing linearly.

b) We don't care about actual time

c) This is why we ignore all constants

E) $O(N^3 + \log N)$ a) From point no.2

If we get very small term hence ignore it.

Always ignore less dominating terms.