## Algorithm & Analysis of Algorithm | L 2 | Data Structure | Infinity Batch | GATE 2022 CSE

## **Unacademy Computer Science**

Vishwadeep is a channel leader on an academy computer science channel for unlimited learning. He has written gate exam multiple times for you guys and the ranks are 1919 hundred eighty two. Tomorrow we are going to have a few more things about operating systems in its basic so that you can learn the small small things of operating system. Live classes which are very interactive you can ask so many doubts extra doubt solving sessions will be having weekly tests. i will be providing you crash courses and hindi english watches rank improvement batches. the content on multiple other things and for that you need to go for an academy plus subscription. If you do not have the good strategy and good planning then you should go for iconic subscription. Algorithm is nothing but a structured solution which we can write in a general language general english or hindi or whatever your language is in that so that we can understand if we will perform this then this. then this operation will be done problem will be solved that is the algorithm. Analysis of algorithm is required when we need to compare multiple solutions for a problem. We have basically two basis of analysis one is space another one is run time the voorithm needs how much space to run. We have the advantage of having this space d exity analysis so space needed to run the algorithm does not include example Sout the input size input size. We urge you to ask you to come again and again an orgain live. Any algorithm you should run or you the completity which is major matter of concern now. If should have should have minimum u vou want to calculate that writhm takes to run one option is you implement that algorithm in some programming language after that you run it on a particular system and then get the time so let 's suppose you have algorithm number one which is taking t1 time some unit microsecond nanosecond something for that algorithm. Scientists went towards this number of operations do one thing let's not implement the algorithm in any programming language but still we can analyze yes we can do cases. case you can't control these external factor of course you can't at some time it might possible that your. cpu will be so much of loaded because of background processes at some. time your cpu is not loaded so you can not control these. external factor in that particular case we can say that's wall clock time viola cheese will not work properly.

Given you n equals to two inputs in an algorithm for algorithm right now look at this suppose algorithm number one taken two steps and algorithm number two took two steps to perform the operation it 's intended operation which one is better. Rate of growth rate of growth is nothing but a function a function which takes in input n and gives you the output. Rate of growth rate of growth is called as rate of complexity. Complexity is nothing but number of steps performed or number of operations performed is equal to number of inputs plus one always. Algorithm runs for