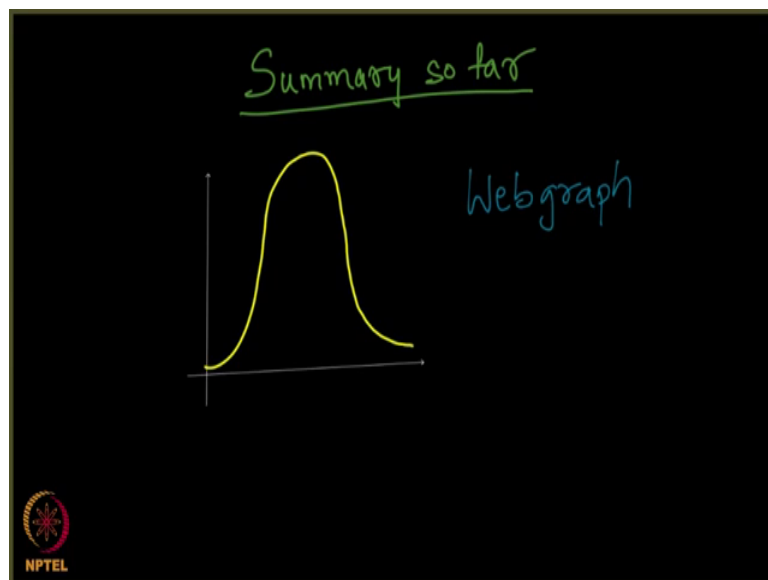**Social Networks**
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Richer Get Richer Phenomenon

Lecture – 120
**Summary So Far**

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So, what are we seen so far, let us summarize it. The summary so, far is the following: we observed the emergence of what is called the normal distribution right. We saw that it is always a curve called the bell curve, the height example of a town right. In a town if you take the heights of different people you will observe this, but then we saw that it is in fact, not the case if you were to be seeing what is called the web graph or the (Refer Time: 00:42) graph, www graph right.
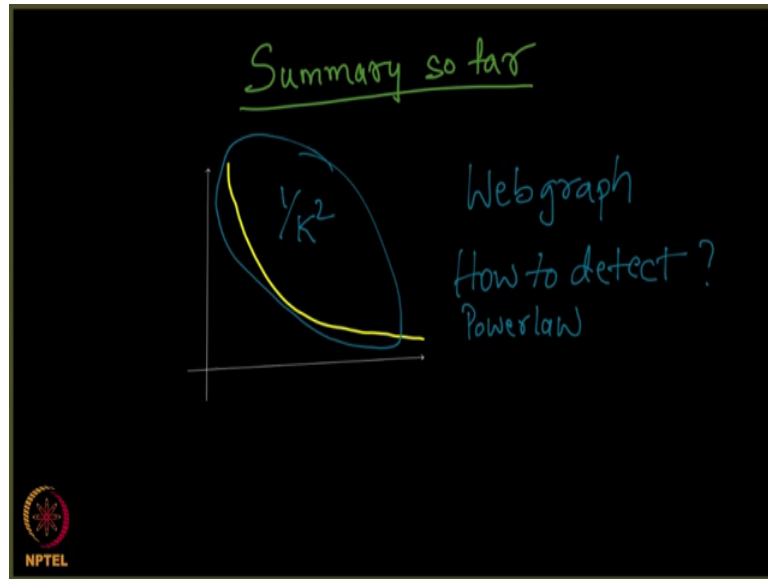
What do you observe? We I told you that we observe a drop like this and even I told you that the drop is basically a function 1 by K square right. And, we even saw how to detect such a thing let us such a thing happening in a network, how did detected right. How you detected power law that was the question we saw, next right perfect and then we switched gears and we saw the process of rich getting richer right.
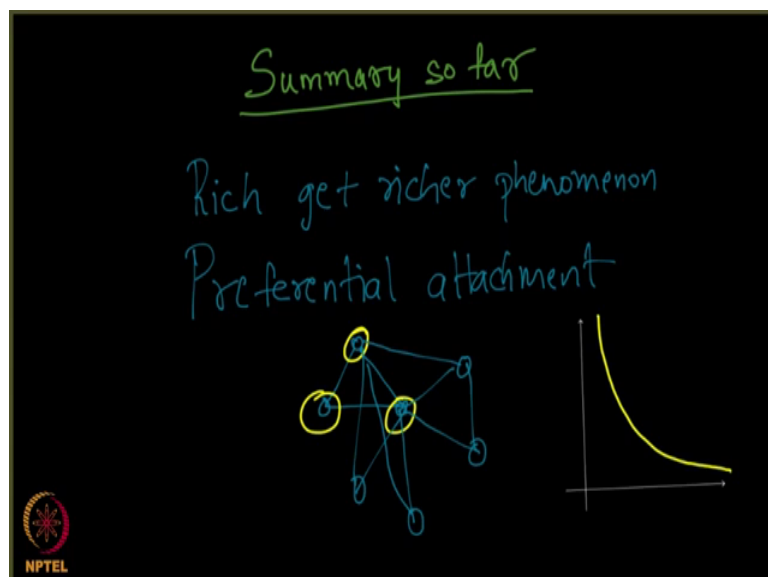
Rich get richer phenomenon and what was that, if you can recollect it was what is called the preferential attachment, preferential attachment. What we say? We said that given

node we start with let say 3 nodes, just as an example we start with 3 nodes and then and a new nodes comes. It respects the degree of the existing nodes and based on the degree proportionately it becomes friends with a couple of people alright. And, as we continue this process as we continue this process we observe that when we plot the degree distribution of such a graph we observe the power law alright. There is a summary so for and now what we will do is you will switch gears and we will try looking at some programming.

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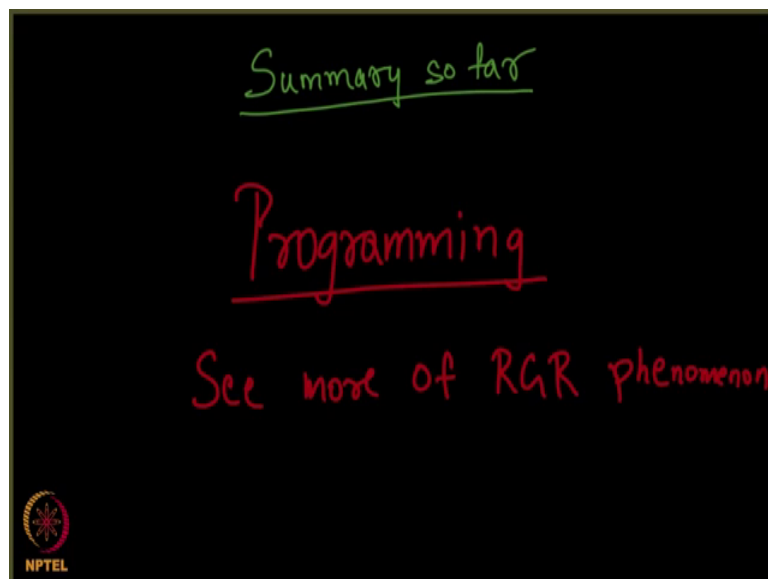
We will try programming whatever we have learnt so far and try to see if we are able to make the same observations that I have hypothesize so far. So, after programming we will get back and then see more of rich getting richer phenomenon. So, now let switch to Python and then see some really cool programming observations.