NPTEL

NPTEL ONLINE CERTIFICATION COURSE

Discrete Mathematics
Graph Theory - 1

Connecting connectedness and path

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In maths, generally we observe that definitions are always complicated,
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but the exact meaning of the definition will be straight forward, here is one such situation, you know this graph is connected while this graph is disconnected,
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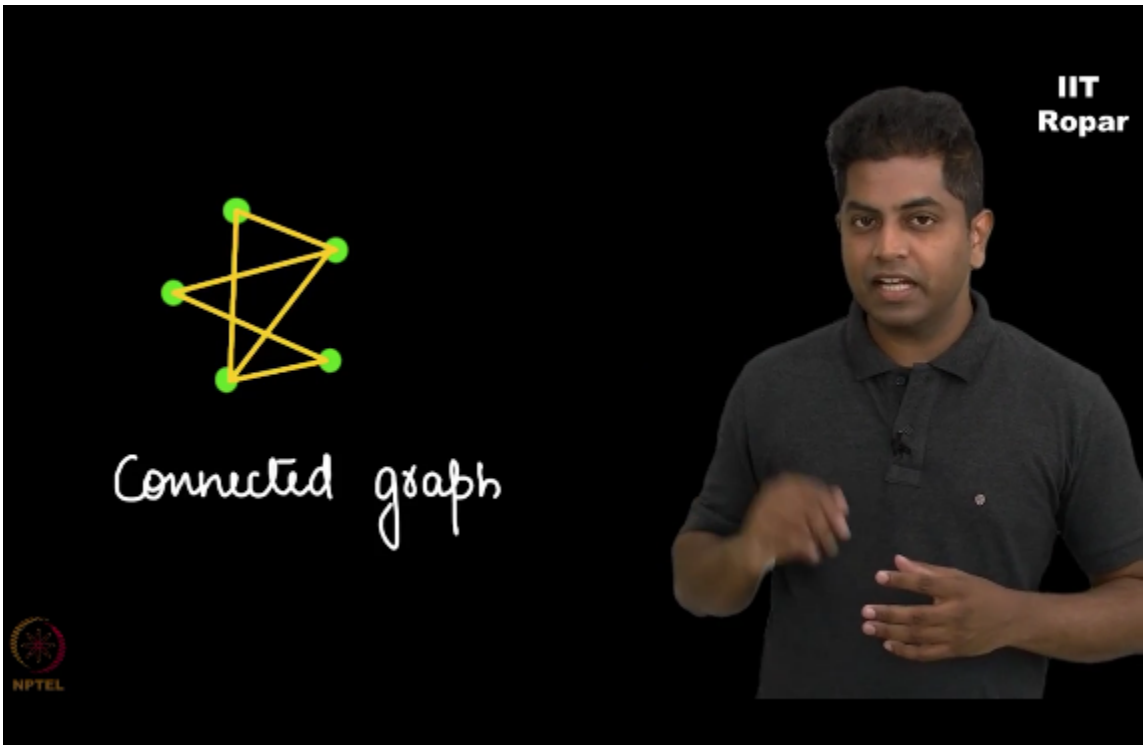

how do we define it properly, mathematically, we define it in a slightly roundabout way, because such a definition done in a very abstract way comes in very handy

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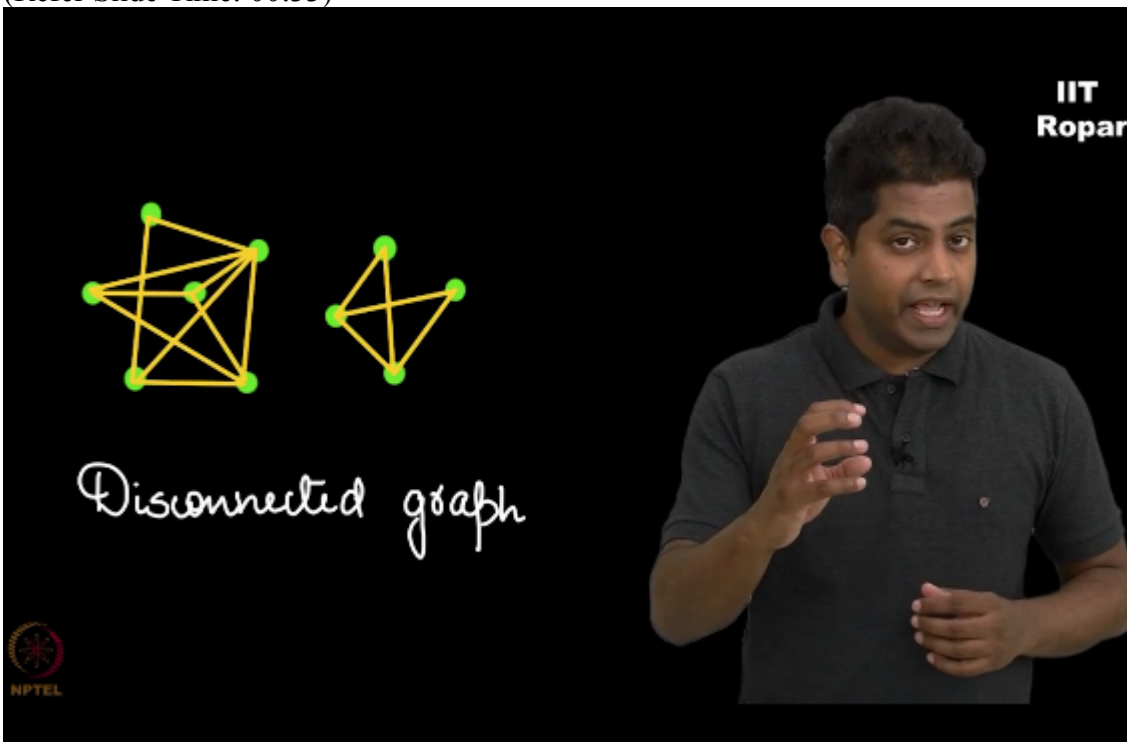

when we are solving some tough problems, so it is important to define things properly.

So how do you define a connected graph? The definition of a connected graph goes like this, a graph where any two vertices if you pick there exists a path from node A to node B, this should be true for any pair of nodes A and B then you say the graph is connected.
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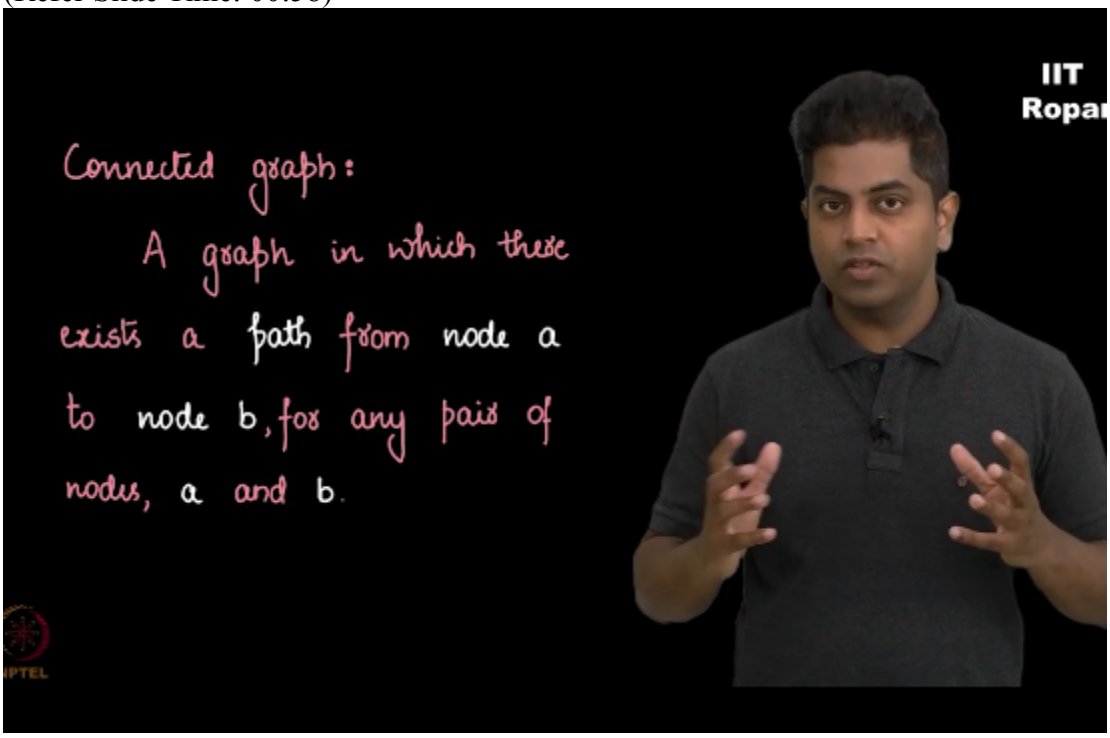

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