

NPTEL
NPTEL ONLINE COURSE
Discrete Mathematics
Logic
Negation - Truthtable
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Here is something for us to note, something that's very important. Look at the statement. Statement P. I have a PhD degree right. What will not P be? Not P would be I do not have a PhD degree right. Now concentrate. Let me P and not P next to each other. I am not telling you which one is true whether P is true or not P is true right. So when P is true which means assume Sudarshan owns a PhD degree then the fact that I do not have a PhD this turns out to be false. When P is true, not P is false. It sounds like I'm stating the obvious but yes you need to know this what is called a truthtable that I am writing here. When P is 1, not p is 0. When P is 0 what do I mean by that? I mean P is not true. I have a PhD is not true. This is false. Then not P will obviously become true. The fact that I don't have a PhD means I do not have a PhD which means not P is true. This is called a truthtable. It simply means when P is true, not P is false. When P is false, not P is true. If you are confused don't be confused I of course am stating the obvious with a lot of examples. Things will be very clear to you.

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