NPTEL NPTEL ONLINE COURSE Discrete Mathematics Logic Introduction to Negation Prof. S.R.S Iyengar Department of Computer Science IIT Ropar

Here is an important point I'm getting you all prepared for the kind of language and notations that we'll be using throughout this chapter. This is one notation that you all should know. So look at these two statements. Statement one, it rained in my location today. That's the first statement. Second statement is yesterday was a full moon day. Now these statements can be true or false, right. There's no ambiguity here. It rains or it doesn't rain. It's a full moon day or it's not a full moon day at least according to the calendar, you see. Okay. so look at this statement first statement P and the second statement Q. What if I tell you you are supposed to insert a not, the word not somewhere and make this entire statement sound the other way around. By that I mean if it's true make it false if it's false make it true. How do you do that? Look at the first statement.

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