CSE 103: Discrete Mathematics(1.2)

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Question 18:

When planning a party you want to invite. Among the people you would like to invite are three touchy friends. You know that if Jasmine attends, she will become unhappy if Samir is there, Samir will attend only if Kanti will be there and Kanti will not attend unless Jasmine also does. Which combination of these three friends can you invite so as not to make someone unhappy.

Answer:

I can invite Jasmine and Kanti.

There are three combinations here:

1. Kanti and Samir
2. Samir and Jasmine
3. Jasmine and Kanti

From these 3 combinations first two are not applicable. In the first combination there is a problem that Kanti will not attend because Jasmine is not there. In the second combination if Samir and Jasmine attends together then Jasmine will be unhappy.

So, only combination number 3(Jasmine and Kanti) is possible.