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Chapter: 1

Section: 2

Exercise: 18

Ques

When planning a party ^{you} ~~to~~ want to know. whom 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 combinations of these three friends can you invite so as not to make someone unhappy?

Solution:

First case: Let us first assume that Kanti is there, then Jasmine has to be there too. (Kanti does not come, when Jasmine does not come) and Samir cannot be there (because Jasmine will be unhappy when Samir is there). Thus Kanti and Jasmine is a possible combination.

Second case:

Now, let us assume, Kanti is not there, then Samir will not attend either (Samir only attends if Kanti is there). There is no condition on Jasmine in this case, thus Jasmine can be invited alone or no one can be invited at all. Result: Kanti and Jasmine
Jasmine alone
No one.