Course : CSE 103

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Chapter: 1
Section: 2
BOOK : DISCRETE MATHEMATICS
AND IT'S APPLICATIONS BY ROSEN
Exercise no. : 22

The exercises 22 relate to inhabitants of the island of knights and knaves created by Smullyan, where knights always tell the truth and knaves always lie. You encounter two people, A and B. Determine, if possible, what AandBare if they address you in the ways described. If you cannot determine what these two people are, can you draw any conclusions?

 Both A and B say "I am a knight."

ANS :

if A is:	if B is :	Truth . values	Is assertion Possible ?
knight	knave	A(T), B(F)	YES
knight	knight	A(T), B(T)	YES
knave	knave	A(F), B(F)	YES
knave	knight	A(F), B(T)	YES

So it is possible for either A or B to be either a knight or a knave .