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Chapter No: 1

Section No: 2

Problem No: 34

34. Let K be the statement, "Kevin is chatting."
Let H be the statement, "Heather is chatting."
Let R be the statement, "Randy is cheating."
Let V be the statement, "Vijay is chatting."
Let A be the statement, "Abby is chatting."

Suppose,

1st	statement is	$S_1 = K \vee H$
2nd	"	$S_2 = R \oplus V$
3rd	"	$S_3 = A \rightarrow R$
4th	"	$S_4 = V \leftrightarrow K$
5th	"	$S_5 = H \rightarrow (A \wedge K)$

To get a conclusion C : $C = S_1 \wedge S_2 \wedge S_3 \wedge S_4 \wedge S_5$

K	H	V	R	A	S ₁	S ₂	S ₃	S ₄	S ₅	C
T	T	T	T	T	T	F	T	T	T	F
T	T	T	T	F	T	F	T	T	F	F
T	T	T	F	T	T	T	F	T	T	F
T	T	T	F	F	T	T	T	T	F	F
T	T	F	T	T	T	T	T	F	T	F
T	T	F	T	F	T	T	F	F	F	F
T	T	F	F	T	T	F	F	F	T	F
T	T	F	F	F	T	F	T	F	F	F
T	F	T	T	T	T	F	T	T	T	F
T	F	T	T	F	T	F	T	T	T	F
T	F	T	F	T	T	T	F	T	T	F
T	F	T	F	F	T	T	T	T	T	T
T	F	F	T	T	T	T	T	F	T	F
T	F	F	T	F	T	T	T	F	T	F
T	F	F	F	T	T	F	F	F	T	F
T	F	F	F	F	T	F	T	F	T	F
F	T	T	T	T	T	F	T	F	F	F
F	T	T	T	F	T	F	T	F	F	F
F	T	T	F	T	T	FT	F	F	F	F
F	T	T	F	F	T	FT	T	F	F	F
F	T	F	T	T	T	FT	T	T	F	F
F	T	F	T	F	T	FT	T	T	F	F
F	T	F	F	T	T	F	F	T	F	F
F	T	F	F	F	T	F	T	T	F	F
F	F	T	T	T	F	F	T	F	T	F
F	F	T	T	F	F	F	T	F	T	F
F	F	T	F	T	F	T	F	F	T	F

F	F	T	F	F	F	T	T	F	T	F
F	F	F	T	T	F	T	T	T	T	F
F	F	F	T	F	F	T	T	T	T	F
F	F	F	F	T	F	F	F	T	T	F
F	F	F	F	F	F	F	T	T	T	F

So, Kevin and vijay are chatting.