Introduction to Logic Programming – WS 2023
Solutions for Exercise Sheet 1

1 Exercises

Exercise 2 (Interpretation of Propositional Formulae)
List all interpretations of the formula $a \vee (b \Rightarrow c)$ which are not a model.

$a \vee (b \Rightarrow c) \equiv a \vee \neg b \vee c$

a	b	c	$a \vee \neg b \vee c$
0	0	0	1
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1

The interpretation $a = \bot \wedge b = \top \wedge c = \bot$ is not a model of the formula.