

Logic for AI — Master 1 Informatique

Class Assignment #12: Argumentation

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1 Extensions

Determine the complete, grounded, and preferred extensions for the following argumentation frameworks (here, $\rightarrow$ denotes the *attack* relation):

1. $a \rightarrow b, b \rightarrow a$
2. $a \rightarrow b, b \rightarrow a, b \rightarrow c$
3. $a \rightarrow b, b \rightarrow a, b \rightarrow c, c \rightarrow d, d \rightarrow c$
4. $a \rightarrow b, b \rightarrow c, c \rightarrow d, d \rightarrow e, e \rightarrow f, f \rightarrow e$
5. $a \rightarrow b, b \rightarrow c, c \rightarrow d, d \rightarrow c$

2 Labelings

Determine the complete labelings for the same argumentation frameworks as in the previous exercise.