EXERCISES WEEK 9 INF3580 SPRING 2012

Martin G. Skjæveland

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9 Semantics

9.1 Literals and blank nodes

Let Γ be the RDF graph below. You will need to interpret both blank nodes and literals using the semantics layed out in the lectures.

1. Create an interpretation $\mathcal{I}_1$ such that $\mathcal{I}_1 \models \Gamma$.

2. Create an interpretation $\mathcal{I}_2$ such that $\mathcal{I}_2 \not\models \Gamma$.

```
 1:  @prefix : <http://www.example.org#> .
 2:  @prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
 3:
 4:  :Tweety rdf:type   :Bird .
 5:  :Nixon  rdf:type   :Republican .
 6:  :Nixon  rdf:type   :Quacker .
 7:  :Nixon  :listensTo :Tweety .
 8:  :Nixon  :likes     [ a :Bird ]   .
 9:  []      :likes     :Nixon .
10:  :Nixon  :hasNickname "Ric" .
11:  :Tweety :hasNickname "Mr. Man" .
12:  :Tweety :likes     :Tux .
```